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Canadian agriculture in the
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canadian agriculture in the seventies

REPORT OF THE
FEDERAL TASK FORCE ON AGRICULTURE

OTTAWA, DECEMBER 1969



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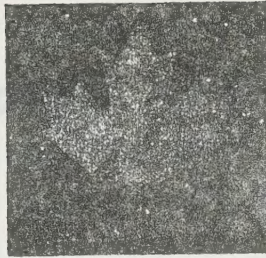
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31 December 1969.

The Honourable H. A. Olson,
Minister of Agriculture,
Ottawa, Ontario.

DEAR SIR:

We are pleased to transmit to you the report of the Federal Task Force on Agriculture entitled "Canadian Agriculture In The Seventies".

Our terms of reference were to analyse the problems of the Canadian agricultural industry and to make recommendations to government with respect to public policy. The most important objective was to outline policy measures which would lead to developing a viable industry over the coming decade. We have attempted to accomplish this task.

The entire Task Force has found the relationship with you and members of your department to be harmonious and productive.

Yours sincerely,

D. R. Campbell

P. Comtois

J. C. Gilson

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FEDERAL TASK FORCE ON AGRICULTURE

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PREFACE

In commissioning the Federal Task Force on Agriculture the Minister of Agriculture attempted to give a positive directional impetus to the seeking of solutions to the many and diverse problems which beset the industry in the nineteen sixties and to provide policy guidelines for the nineteen seventies.

After over two years of study and many meetings with persons and groups concerned with the agricultural industry (see Appendix D and E), examination of the results of a research program and submissions (see Appendix F), the Task Force report has been prepared for consideration by government and the industry. This report is not intended to be the last work in analysis and recommendations for solution of agriculture's problems in Canada. The problems are dynamic, as are the facts and opinions contributing to the analysis. Thus, the work of this Task Force is submitted, in this report, as a contribution to the process of ameliorating the position of the agriculture sector within the Canadian and world economies.

The business of food production and utilization for non-food purposes of land-based agricultural products probably ranks as the largest and almost certainly the oldest in the world. In such an industry, technological change is inevitable; however, acceptance of change in methods of production, processing and distribution as well as the rapidly changing economic structure is difficult. Such acceptance is more difficult for persons of limited technological training and financial backing. It is the responsibility of all participants in an industry to seek accommodation of the changes but particularly the responsibility of government to fill in those gaps created by evolution.

There are great disparities in acceptance and utilization of the benefits of modern technology. To formulate and apply policies to satisfy all levels of

need in all sub-sectors of the Canadian agricultural industry is difficult and perplexing. Selected policies to attack the more contentious problems often divert from the principle of equal treatment of agriculture and the other sectors of the economy. Criticism is rife in the agricultural sphere as is gratuitous advice and contrary opinions. The Task Force, while starting with many differences has happily been successful in reaching a concensus and has produced a meaningful report as a result.

Canadian agriculture is a large, complex industry which includes far more components than just the farmer. In the course of an examination, such as the Task Force has given this industry, many inconsistencies and irrational facts come to light. As these obstacles show up one craves for more time to research and analyze each new factor fully. What soon becomes obvious is that the evolution is so rapid that at some point one must stop, take a stand and report.

Because of the urgency of the work the Task Force was obliged to commission consultants rapidly after inauguration to provide a researched background for the greater task of sifting through the pros and cons, culminating in recommendations to government. It was found that there was a dearth of good researchers available in some of the fields to be investigated by the Task Force. A constant complaint, by those who did undertake the work, was a severe shortage of data. The Task Force noted that few researchers associated with agriculture were willing to venture very far from the status quo and make recommendations for startling changes in the industry.

The Task Force has itself published only three of the research reports produced for it but feels that all the work done by consultants should be made available to those interested. Accordingly the research reports produced under the Task Force program are deposited in the library of the Canada Department of Agriculture from which they can be borrowed by interested parties.

ACKNOWLEDGEMENTS

In the course of its work the Task Force received valuable assistance from many individuals, groups and organizations whose services are gratefully acknowledged.

Thanks are extended to the Federal government's Inter-departmental Committee and to the provincial deputy ministers of agriculture, particularly the five who formed the I.C.C.A.P. for all their encouragement, advice and assistance (see Appendix B). High on our list of persons to thank are the organizers of the Canadian Agricultural Congress, which was held in March 1969, whose work contributed greatly to its success.

There are too many persons to name in the Canada Department of Agriculture to whom we are indebted for assistance. We do, nevertheless, thank the Department as a whole for the privilege to work unfettered and for providing prompt and constructive advice and assistance when we requested same. The guidance and counsel given to our Co-Ordinator in the execution of his duties was most appreciated. The Department of Industry, Trade and Commerce also rendered valuable assistance in the work.

Special thanks go to the researchers and their assistants (see Appendix D). The Task Force expresses its sorrow occasioned by the death of Professor Hadley Van Vliet of the University of Saskatchewan. This report would have greatly benefitted from his skill and judgment in his study on the structure of agriculture.

The contribution by Mr. George Grant is especially worthy of mention; he provided much needed "in house" research which cleared up many contentious issues and filled in gaps in the research program in a most diligent manner.

To those persons across Canada with whom the Task Force met and who submitted briefs must also be extended thanks (see Appendices E and F). A special note of thanks goes to the United States Embassy in Ottawa who arranged for most constructive and cordial discussions with the Secretary and senior officials of the U.S.D.A. in Washington through their Foreign Agricultural Service.

Our special thanks are extended to the female full and part-time, secretarial staff whose work in the preparation of the papers for the Canadian Agricultural Congress and the typing of this report stands out as a most significant contribution; also Mr. Vaillancourt who served as Secretary from inception until March 1969, after which date these duties were assigned to Mr. Woodward.

Finally the Task Force acknowledges with appreciation the able leadership, loyalty, conscientiousness and total commitment to the work in the full-time direction of the operations of the Secretariat of Mr. Douglas Woodward, the Co-Ordinator. Mr. Woodward handled the complete financial affairs of the Task Force with skill and good judgment. He kept a large volume of documentation flowing from the headquarters which was indispensable to the work of the members. Later he assumed editorial functions and became responsible for the production of this report. Without his contribution this report would not have been available at this time and its quality would have suffered.

FEDERAL TASK FORCE ON AGRICULTURE
OTTAWA, DECEMBER 1969.

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part one

STRUCTURE

chapter one

CANADIAN AGRICULTURE IN PERSPECTIVE

INTRODUCTION¹

In April, 1967, confronted with the many critical and complex problems of agriculture, the Cabinet decided to appoint a Task Force to assess the industry and recommend policies and programs for improvement. The Task Force was named in September 1967 and began work in the fall of 1967. This report, summarizing our findings and recommendations, is based mainly on 27 months of wide-ranging investigation and study by the Task Force, 25 research studies by Canadian university teacher-researchers and professional consulting firms, many meetings with farming and agribusiness representatives and government officials across the country, and the feedback from the forum provided by the Canadian Agriculture Congress, March 1969.

Although this Report is a summary of our findings, analysis, conclusions and recommendations, it is detailed and wide-ranging in scope. The purpose of this chapter is to present an overview of agriculture and to introduce the conceptual framework and point of view underlying our study and recommendations.

In this chapter we shall briefly describe the Canadian agricultural system and its environment, the major forces that will shape agriculture over the next decade, the performance and major problems, the main characteristics of the model toward which Canadian agriculture should be evolving and the key policies and programs needed to assist the transition of Canadian agriculture

¹In this Report the word agriculture includes farmers and agribusiness. Agribusiness is used in the narrower context to include farm supply firms and those engaged in all phases of marketing.

from what it is to what it should be in the short, medium and long term future.

The Canadian Agriculture System

Any recommendations of national policies and programs for the Federal Government must be based on an acute understanding of the major component parts of Canadian agriculture and how they combine together in a total system.

Although the primary focus of the Task Force was on the problems of farming, it is obvious that farming cannot exist in isolation but is an integral sub-unit of the total agricultural system which includes the following mutually dependent parts:

manufacturers, distributors, and sellers of farm and agribusiness input products and services; farms, farmers, and farm labour; farm product marketing boards and sales agencies; farm product transporters, handlers and storage agents; food processors, food product distributors, wholesalers, and retailers; other food outlets such as institutions, hotels, restaurants; consumers; governments; research and educational institutions and the many organizations representing farmers, agribusiness, researchers and others involved in agriculture.

The function of this system which weaves in and out of the entire economy is to process, manage, regulate and study the flow of resources from farm inputs to the final consumer. Its central purposes are to satisfy the food wants of consumers and to provide adequate income and security for all who own and/or work in these organizations. Each sub-unit has a vital function and legitimate ownership, employment and participation stakes. Because some are linked in buyer-seller relationships there is a basic conflict of interest in their relationships. But while many must compete with each other it is important that they co-operate because they are mutually dependent.

To convey a more accurate idea of the size and scope of the Canadian agricultural industry let us review briefly the key indicators of its dimensions:

Production Sector: includes an occupied farm land area of 174 million acres; a farm population of around 2 million; approximately 400,000 farms, 500,000 farm workers. In 1968 farmers paid about \$185 million in taxes on land and buildings.

Supply Sector: in 1968 farmers spent around \$425 million on farm machinery, \$212 million on fertilizers, \$54 million on pesticides, \$568 million on feed and \$245 million on new construction. Many other millions of dollars were spent on electricity, telephones, gasoline, banking services etc.

Marketing and Processing Sector: firms processing farm products only into basic foods and feed had sales of \$4,800 million and paid \$665 million in salaries and wages to 146,000 employees in 1966. This does not include wineries, breweries, distilleries, tobacco manufacturers nor the retailers and traders in processed products.

Food Consumers: in 1968 about 21 million Canadian consumers spent \$8,500 million on food and another \$2,500 million on tobacco and alcoholic beverages.

Government: the Canada Department of Agriculture employs more than 12,000 persons, full-time; operates more than 200 separate establishments; provincial departments of agriculture employ in excess of 30,000 persons with a combined budget in excess of \$200 million.

The figures speak for themselves in indicating that it is almost impossible to over-emphasize the economic and social importance of agriculture to all Canadians.

The Environment of The Canadian Agriculture System

The Canadian agricultural industry exists in, trades with, and is highly dependent on the environments with which it must interact.

The immediate domestic environment is the Canadian political-economic-social technological system. Because of the fundamental differences among its five regional components—The Maritimes, Quebec, Ontario, Prairies, and British Columbia—there are substantial divergencies in the performance and prospects for farming and agribusiness in each of these areas. As a result, Canadian agriculture confronts the planner with such a variety of unique regional problems and opportunities that the formation and implementation of national policies and programs that apply equally well in all regions is difficult, if not impossible.

Its more distant but vitally important, international environment is the complex of foreign nations, who are our most important customers and/or suppliers and/or competitors. Because of its heavy reliance on export trade, foreign developments—ranging from weather, crop planning, research and technology, food consumption, national economic planning, and political relationships—almost anywhere in the world can have drastic short, medium and long-term effects on the markets, competition, prices, and profits of the Canadian agricultural industry.

Key Forces Affecting the Canadian Agricultural System

The supply-demand-competitive situation in Canadian agriculture results from the inter-play of many continuously changing internal and external forces. Whether the change is relatively gradual (e.g. the declining per capita consumption of milk) or drastic (e.g. the world cereal grain revolution), it is the engine that generates a never-ending stream of new problems and opportunities confronting policy planners and decision-makers throughout the system. Since the universal key to effective planning and management is to monitor change, to anticipate problems and opportunities and to formulate, implement and audit programs to solve the problems and capitalize on the opportunities, let us review briefly the major forces that have made Canadian agriculture what it is and will shape and determine its future.

1. The primary world wide force causing change in agriculture is technological development. Science in the form of a never-ending cornucopia of research and development innovations, has increased and will continue to increase dramatically the production per man hour and unit of land. This trend promises not only to continue indefinitely but also to accelerate.

2. Commodity surpluses, overproduction and excess capacity constitute the second major force hanging over the market and depressing prices especially in major commodities such as grains and dairy products.

3. Agricultural development and economic planning in less developed countries is being pushed to achieve high and rising levels of self-sufficiency. Thus many previous export markets may be dwindling. India, Pakistan, the Philippines and Mexico, for example, may be approaching self-sufficiency in grain production and have their own export and surplus problems perhaps on the horizon.

4. Political intervention in the form of subsidies, tariffs and trade agreements prevent the free market interplay of supply, demand and competitive advantage in many markets.

5. Slow growth in food demand cannot be expanded to absorb surpluses. Overall consumption of food products is growing too slowly to bring about any significant improvement in the supply-demand balance in the foreseeable future.

In addition to these world-wide forces, Canadian agriculture is experiencing other heavy pressures arising from specific domestic problems.

1. The political power of farmers is declining. Farm population, which was 31.7 per cent of total population in 1939 declined to 27.4 per cent in 1941, 20.8 per cent in 1951, 11.7 per cent in 1961 and 9.8 per cent in 1966. By 1980 farm population will have declined still further.

2. Canada is experiencing problems such as poverty, urban social disintegration, housing, regional disparities and pollution which affect larger numbers of citizens and will require increasing attention and allocation of resources.

3. All levels of Canadian governments—federal, provincial and municipal—are experiencing severe shortages of funds which promise to worsen substantially in the future. This means that the allocation of substantial public funds to agricultural subsidies will have to compete with expenditures on other public needs such as poverty, health, education, and training.

4. The substantive and emotional aspects of the wheat problem—surplus production, excess carry-over stocks, diminishing exports and falling prices and incomes—are escalating to crisis level.

5. Because the wheat supply-demand balance cannot be improved and brought under control without a very substantial reduction in wheat acreage, the wheat problem may spill over in 1970 into feed grains and oil seeds and later to livestock.

6. Families operating one-third of Canadian farms are classified as below the poverty line. Lacking the opportunity, ability, training and resources to become viable farmers, they constitute a substantial brake on progress.

7. Both government and private sectors of agriculture are marked by the negative forces of disorganization, poor management, jurisdictional disputes and individualism.

No industry can be subject to these kinds of internal and external forces without experiencing chronic price deterioration, chaotic market conditions and widespread economic, social and political strains.

Fortunately many of these negative forces are counteracted by important positive forces such as the experience, know-how and substantial motivation of the many farmers, employees and managers in agriculture, a high and rising level of technological development, a strong and growing resource base, a generally good reputation for quality and strong market demand for many products. Nevertheless the negative forces are strong and persistent.

Problems of Canadian Agriculture

A problem exists when people think it exists. Performance of Canadian agriculture is rated as poor by many farmers, consumers, rural poor, agribusiness managers, farm input suppliers, the press and some economic and social planners, when compared to the rating values of each. Much interviewing of many different stakeholders in agriculture across the country, by the Task Force members, has indicated that few were satisfied with the performance of the industry. Problems do indeed exist.

The symptomatic problems, all of which will be examined in detail in the following chapters, include the following: low incomes, over-production, prevalence of small, non-viable farms, increasing regional disparities, low and unstable prices, cost-price squeeze, slow market growth, diminishing export markets, commodity problem e.g. wheat and dairy, declining farm share of national income, paternalism and ineffectiveness of government policies and programs and a host of others.

Penetrating analysis of these symptomatic problems indicates most are caused by the major root problems which are *lack of effective formulation and implementation of policies and programs* and its twin *lack of an adequate organization structure* to serve as a vehicle for integrated, co-operative action to improve the performance of agriculture. Unfortunately, the capacity of the conventional wisdom and the established institutions and many of their top officials to deal adequately with the relevant problems is in doubt. Without a drastic improvement in management and organization the future points to a never-ending stream of new problems such as the following;

- The wheat glut may be replaced by unwanted, market disturbing, surpluses in feed grains, oil seeds and livestock.
- Internal bickering and jurisdictional disputes in the many competing farm organizations may prevent co-operative planning and action and further fragment the industry.

- Governments may reduce the amount of initiative forthcoming from farm leaders and agribusiness organizations if they were to become increasingly paternalistic.
- Taxpayers may revolt against the substantial drain on the Treasury for agricultural supports.
- Federal-provincial and inter-regional disputes among government and commodity marketing board organizations may nullify attempts to rationalize commodity production and marketing.
- The loss of competitive position in world markets may make imports so attractive that consumer pressures build up to buy cheaper foreign products.

These are but a few of the potential problem areas where future trouble may erupt on short notice unless we implement plans to enlist the highest levels of management and responsible leadership and provide a rational organizational structure from which such men can begin the long, arduous task of improving agricultural performance.

Canadian Agriculture—1990 Model

The purpose of effective government action must be to assist the transition from what agriculture is today to what it should be in 1980, which is of course, only a mile post on the journey to 1990 and beyond. Therefore, before we can decide what the main recommendations in a program for transition should be we must consider the model toward which we are aiming.

Many of the major characteristics of the 1990 model of the Canadian agricultural system can be predicted on the basis of forces now visible. Some of the most obvious trends are as follows:

- decreasing numbers of farms, farmers, farm labour force and farm population
- fewer family farms
- increasing farm size
- tougher domestic and international competition
- increasing technological change
- stronger marketing boards, increasingly national in scope
- less independence for individuals
- increasing planning and contractual arrangements resulting in backward, forward, horizontal integration
- increase in computer centered data processing systems and management assistance plans
- better forecasting of markets and prices
- constant improvement in quality of management throughout agriculture
- greater reliance on, and use of, planning
- rising incomes
- improved research training education and management development for farming and agribusiness
- fewer government subsidies and support programs

While there are many other trends that will affect the agricultural system, these alone will cause fundamental change.

What kind of agriculture will we probably have in 1990 if these trends continue? Some of the highlights of the Task Force's 1990 model of agriculture are as follows:

1. There will be a substantial reduction in number of commercial farms. Some will be family farms but all will be rationally managed, profit oriented businesses. Farm mergers and consolidation will result in much larger units, not primarily for increased production efficiency but to structure units that are large enough to afford better management.
2. Farm organizations, marketing boards, co-operatives and similar organizations will be much larger, more professionally managed and users of much more sophisticated management, data processing, research and planning techniques.
3. Because of a drastic reduction in farm population, (probably to about 3 per cent to 4 per cent of population), the balance of power among farmers, consumers, and taxpayers, will change substantially. The government will become less involved in agriculture. Farm subsidies will be cut and the entire private sector of the agricultural system will be required to accept a much greater degree of independence.
4. Management, survival and cost-price realities will force a more effective rationalization of the relationships of production and sales; sales, costs and profits; and return on investment in agriculture from the smallest farm to the largest corporation.
5. As governments encourage agriculture to rationalize its management processes and organizational structure, a clear-cut separation of welfare and commercial farm policy programs will emerge. Some form of guaranteed annual income will be taken for granted.
6. As the necessity for planning increases, the drive for security will be manifest in increasing formal and informal integration.
7. As the size of units increases, financial requirements multiply and operating problems increase in complexity, ease of entry into commercial farming will be drastically cut allowing much greater rationalization of supply-demand relationships.
8. As a high and rising proportion of farm workers become employees working for salaries and wages, farm employee unions may emerge and become a factor in the bargaining process.

In sketching out this kind of a model for agriculture circa 1990, we are of course rejecting the "public utility" or socialized concept of agriculture. Members of the Task Force sincerely hope that option is avoided.

Key Recommendations

The obvious keynote that permeates all our recommendations is that the government should intelligently assist an orderly and planned transition that will encourage agricultural adjustment to achieve the largest possible gains at the lowest possible tangible and intangible costs. Another theme running through all our recommendations is that governments should reduce their direct involvement in agriculture thereby encouraging farmers, farm organizations and agribusiness to improve their management and leadership functions and stand more self-sufficiently on their own. We assume that agriculture should be operated much as any other industry. If this is not feasible, the agricultural industry invites a degree of government paternalism that agriculture may not want. It is important to note that this in no way implies a reversion to anything approaching a simplistic laissez faire system. The system we propose in this Report includes institutions such as national marketing boards, stabilization programs etc. and is compatible with a contemporary complex industrial society.

The main principles of our recommendations, spelled out in detail in later chapters, are as follows:

1. The surpluses must be controlled and reduced to manageable proportions by reducing production drastically, if necessary. Where alternatives exist, production resources must be shifted to more promising market opportunities. Where such alternatives cannot be found, land and other resources must be retired.
2. Governments should provide temporary, limited programs of assistance for the crop switching and land retirement, necessary to cut surplus production. At the same time this Report emphasizes programs to expand demand, particularly on the international scene.
3. Agricultural subsidies and price supports that are not effective and efficient in achieving worthwhile high priority objectives should be phased out.
4. Younger non-viable farmers should be moved out of farming through temporary programs of welfare, education and provision of jobs in other sectors of the economy. Older farmers should be given assistance to ensure that they have at least a "livable" standard of living.
5. Improvement of management must be encouraged by providing seed money for management training, provision of information processing systems, market and price forecasts and other management tools.
6. The organizational structure of agriculture both in the government and private sectors should be rationalized. *Management by objectives, program planning and budgeting, cost-benefit analysis and other modern management techniques should be adopted.* Every public policy should embrace these principles and procedures.

Outline of the Report

Let us review briefly the outline of this Report. Chapter 2 presents a more detailed review of the major problems, issues and pertinent background information related to Canadian agriculture. Chapter 3 concludes the introductory section with an examination of the goals that should govern policies and programs for the various component parts of the agricultural system.

Part Two presents an analysis of the situation in regard to the major commodities—wheat, feed grains, and oil seeds; livestock and poultry; dairy; fruits and vegetables; tobacco and sugarbeets. This section begins with a review of the international trade problems related to these commodities and concludes with our view of how these commodities will probably fit together in a total materials balance for 1980 if our recommendations are followed and the industry is reasonably successful in working out of its current difficulties.

Part Three presents our size-up and analysis of the structure and functions of the institutional and organizational framework of agriculture. The specific topics addressed in this section are the roles of government, marketing boards, farm organizations, agribusiness, credit, research and crop insurance.

Part Four examines the low income sector of agriculture, a subject that must be separated from the problems of viable, commercial farming and dealt with as a special topic on its own.

Part Five, for the convenience of the reader, draws together in one package a summary of all the conclusions and recommendations from the chapters in the first four sections.

Part Six presents appendices relating to the establishment of the Task Force; persons and organizations associated with the work; research program; meetings held; and submissions received.

chapter two

THE SETTING

INTRODUCTION

There can be no doubt that Canadian agriculture has more than its share of difficulties and uncertainties. Throughout this Report the Task Force has attempted to identify and analyze both widespread general problems such as those of poverty and more specific problems such as the current wheat surplus and to make recommendations concerning them. There are a number of important themes and considerations which transcend specific matters such as wheat surpluses and egg marketing boards; these themes are brought together here in this broad introductory chapter appropriately called "The Setting".

Problems from Different Viewpoints

"I see, quoth he, the elephant is very like a tree."

The main problems of Canadian agriculture, as most *farmers* see them, are two in number—low farm incomes and uncertainty as to the future. There are other problems of course, such as instability of prices and incomes, rising cost of credit, inability to market wheat, difficulty of finding farm labour and so on but these are secondary compared with low incomes and uncertainty.

That incomes are low relative to non-farm incomes is beyond question. The fact that the proportion of national income going to agriculture is about one-half of the proportion of farm labour within the total labour force (eight and four per cent respectively in 1967) may be challenged on the grounds that the prices attributed to farm perquisites are too low, that farmers experience tax free capital gains, that costs of living are different, that there

are important psychic advantages in farming and so forth. What cannot be misinterpreted, however, is the fact that the farm labour force declined by 55 per cent between 1946 and 1967. After all of the psychic and non-monetary benefits had been assessed by farm and non-farm people, the departure of so many farm people from agriculture indicates the disparity of income in all forms.

Uncertainty is a factor which troubles more and more farmers. What are the prospects for exports in competition with subsidized production elsewhere? What is likely to happen to land values? Is it better to borrow extensively at high interest rates or settle for a safer and perhaps declining income? Is it wise to expand and become more dependent upon hired labour which may not be available tomorrow morning? These are not new questions but their size and urgency are much greater than ever before.

The main problems of Canadian agriculture, as seen by *agribusinessmen* turn around the subject of markets. Good farm incomes mean better markets for machinery, fertilizer and other inputs. When there are good markets for farm products there is more business for milk processors, meat packers, elevator operators and retailers. There are worrisome problems too, of producer marketing board regulations, of subsidized competition, of accusations of inefficiency or monopoly. Basically, though, the welfare of agribusiness is inextricably tied with that of the farmers.

The problems of agriculture, as *governments* see them, arise largely out of the basic low farm income problem. To governments, the cost to the Treasury of price supports and other programs become part of the "farm problem". With inflationary pressures always present, cabinet ministers divide on the question of food prices—Agricultural Ministers wanting them higher to meet the farm income problem and Consumer Affairs Ministers wanting them lower to meet the inflationary cost-of-living problem. Then, too, governments find that the social problems arising out of low farm incomes necessitate Manpower, ARDA and urban housing and adjustment programs. Finally, governments find agriculture to be a special subject in international negotiations and to be an important but sometimes widely fluctuating earner of vital foreign exchange.

The main problems of agriculture as the *Task Force* sees them also revolve around the fact of low farm incomes. Low incomes are a problem in themselves but they are also symptoms of even deeper problems in the allocation of resources between agriculture and other sectors, in labour mobility and thus in education and alternative employment, in the international competitiveness of Canadian products especially in the light of heavy subsidization and protection in competing countries, and finally in the adequacy of government agricultural programs. It is with these problems that most of this Report is concerned.

Supply and Demand—Surpluses and Instability

Farm incomes are lower than non-farm incomes in almost every country. (Almost the only exception is the United Kingdom, where a small farm

population, large food deficits, balance of payments problems and massive government payments combine to make farm incomes equivalent to the national average.) That incomes are low and unstable in almost all countries is no accident, nor is it the result of conspiracies on a grand scale by forces in other sectors of the economy or in government. The underlying supply and demand conditions in farming are such as to result in low farm incomes, in unstable incomes, prices and output and in a fairly large number of redundant farmers.¹

The *Supply* side has four particularly significant factors:

1. Large number of producers.—There is a sound economic reason for there being a large number of producers. Even if all farms were of such a size to be able to produce at the lowest possible cost per unit, the average farmer's output would be so small relative to total output that he could not, by himself, affect prices in any way.²
2. Rapid improvements in production technology and management.—The Fifth Annual Report of the Economic Council of Canada called further attention to the rapid rate of technological and management change in agriculture since 1946, which has resulted in a much faster growth in output per worker in farming than in the economy as a whole. Two results follow:
 - (a) even if farm prices remain constant, output increases with improved technology and
 - (b) some producers are less able to employ the new technology than others and shall fall behind competitively and in incomes.
3. Decreases in farm prices cause only small declines in output.—In farming, the less flexible costs³ are a high proportion of total costs and therefore prices would have to fall drastically before output would be much reduced. This statement holds for agriculture as a whole and in no way rules out the tendency to shift resources from the production of one product to another in response to changes in their relative prices. This shift from one commodity to another becomes less with increased specialization.
4. Instability of output.—Output varies seasonally and among years because of weather and other conditions of nature. Crop failures bear quite unequally upon individuals even when total output is stable.

The *Demand* side has five important factors:

1. Per capita expenditures by Canadian consumers for specific farm products tend to fall when domestic output is increased. For example,

¹ Educational levels of attainment are generally low among farmers and farm workers. This does not help their relative position in agriculture.

² A disadvantage farmers try to overcome through co-operative and marketing boards.

³ Fixed costs include a good deal or all, of the operator's and family labour as well as other overheads.

if the number of hogs coming to the Canadian market increased by ten per cent, Canadian consumers would purchase all of this output only if prices fell by more than ten per cent.

2. On export markets the volume of and revenue from Canadian sales abroad can be increased considerably by a small reduction in price. This applies to most farm products but probably not to wheat. If Canadian exports are a small part of world trade, as is the case for all farm exports except wheat, a reduction in the price of Canadian exports is unlikely to cause similar price cutting by other exporters or by producers in the importing country.
3. As incomes rise, Canadian expenditures on food increase only very slightly however domestic demand for food increases proportionately with growth of population. More expensive products and more highly processed foods tend to replace less expensive and less processed.
4. Export markets are subject to protection or to the competition of export subsidies. Because 25 to 30 per cent of Canadian farm products are exported, such competition is crucial; because agricultural exports are a much bigger proportion of national income in Canada than in the United States, export subsidies would be proportionately much more costly to Canada.
5. Except where marketing boards use the authority delegated to them to operate two-price systems, the price at which the last five (or even one) per cent can be sold determines the price of the entire quantity.

Consequences of Supply and Demand Conditions

1. For some products the level of output is greater than that which would maximize gross and net revenues. Each producer assumes that his level of output will not affect price; the sum of these individual decisions is an output larger than that which would maximize gross returns to the producers of the commodity. This is a major reason for demands by producers for supply management.

2. Average net farm incomes are low relative to average incomes of most other occupations. While attempts to measure and compare incomes are difficult because of problems of pricing, income in kind, personal satisfaction, security, growth of asset values, off-farm earnings and so forth, one point is clear and that is that the farm labour force has declined by 55 per cent since 1946. This fact indicates the relative unattractiveness of farming especially since there are no legal barriers to entry into the industry.

3. Per capita farm incomes are low because market offerings increase more rapidly than does domestic demand and much of our exports must be sold in protected foreign markets or against subsidized exports, or in competition with highly efficient low-cost producers (eg. New Zealand milk producers and American corn producers). With lower prices and incomes more farmers should leave agriculture but often they have poor alternatives, no apparent

alternatives or they would prefer low farm incomes to the social and psychological problems that often go with moving off the farm.

4. Prices fluctuate, sometimes substantially, as a result of crop failures or bumper crops, of shifting of land, labour and capital from the production of one commodity to that of another, loss of export markets or sudden increases in export demand and sudden changes in imports. Cycles of production and therefore of prices occur because individual farmers are not aware of decisions by others to increase output in response to higher present prices and vice versa.

5. Gross incomes fluctuate, though not usually as much as prices.

6. Given their levels of production, management capacities and availability of assets, many farmers could never make a satisfactory level of income from farming. If they were to be provided with the assets to increase incomes, others would be forced out of farming because their increased production would lower prices, given the demand conditions for Canadian farm products.

7. These results—low farm incomes, unstable prices and incomes and redundant farmers—arise from economic forces to be found in every non-communist country (and in fact in communist countries too, but that is another story which is irrelevant here). The response to them is the core of farm policy in every country. How nations respond depends upon their basic ideology concerning the role of government, upon political pressures, production-consumption surpluses or deficits and so forth. No one approach can be right for all nations or for all times.

The Cost-Price Squeeze

There have been many comparisons made between two Dominion Bureau of Statistics price indices—the Index of Prices Received by Farmers and the Price Index of Commodities and Services Used by Farmers. The former represents changes in prices received by farmers for the products they sell and the latter represents or is supposed to represent changes in the prices of inputs such as farm labour, machinery, fertilizer and so forth. Quite incorrectly, as elaborated below, it is regarded as a “cost of production index”. For 1968 the former stood at 298 and the latter at 387, both based on 1935-39 = 100.

Comparisons between these two indices and comparisons between the American equivalent and the Canadian Price Index of Commodities and Services Used by Farmers can be, and usually are, quite misleading. The Canadian Price Index of Commodities and Services Used by Farmers is so out-of-date and misleading that the Task Force contends that publication of it should be suspended until it has been up-dated. Statistics can be misleading in the best of circumstances, especially when presented as an index (which can be prepared in a number of ways, all of which are likely to give widely varying results).

The Index measures the weighted average change in prices of a set of goods and services purchased by farmers *in 1938*. To put it in a different way; if it cost \$100 at 1935-39 prices to buy the particular combination of inputs that farmers bought in 1938 (so many hours of labour, so many gallons of gasoline, etc.) then in 1968 it would cost \$387 to buy this same combination of goods (the same number of hours of labour, gallons of gas, etc. as in 1938). It would cost \$387 because, as noted above, the Index for 1968 was 387.

Even persons unacquainted with the complex world of statistics recognize that when agriculture has gone through a "revolution" in technology and management in the past 20 years, an index that is based upon the same combination of goods in 1968 as in 1938 is not going to tell one anything useful about the "cost of production". For one thing the combination will change partly because of changes in relative prices and partly because of changes in technology. Labour, which represented 33.5 per cent of the 1938 expenditures is now less than ten per cent but the Index assumes no change. Since wage rates have increased more rapidly than the price of any other input, to continue to give the same heavy weight to wages makes the Index rise rapidly. For another thing, changes in productivity and in scale of operations mean that the same number of units of an input will produce more in 1968 than in 1938. The examples of improved seed, of fertilizer applied according to soil tests, of non-comparable 1938 and 1968 tillage equipment make the point.

Comparisons between the American and Canadian Indices are almost equally misleading. The weight base for the U.S. Index is 1958 compared with Canada's 1938 and therefore the U.S. Index is a better measure of recent price changes.

All of the above is intended to emphasize the point that the widely used Price Index of Commodities and Services Used by Farmers cannot be equated to "cost of production" and in fact should be suspended or up-dated. However, having debunked the use of the present Index, the Task Force would be totally wrong if it were to leave the impression that there is no cost-price squeeze.

Even after adjustments have been made for the biases in the Index, it is apparent that there has been a more rapid increase in the prices of inputs than of prices of products sold. Now the real questions arise out of comparing changes in productivity of inputs, price of inputs and price of products sold. If average farm productivity per unit of input does not rise faster than the price of inputs, the cost of production will rise, tending to reduce farm income and the competitiveness of Canadian products in world markets.

Competition and Income

Farmers are well aware that theirs is a highly competitive sector, usually buying from and selling to sectors with only a few large firms. This accounts for the creation of supply and marketing co-operatives and for demands by

farmers for marketing boards. It accounts also for a feeling that agribusiness is either very profitable, very inefficient or both. Whichever of these alternatives is the case, so runs this point of view, farmers suffer in income, because if agribusiness is profitable it is as a result of excessive margins and if it is inefficient it requires large margins just to stay in business. Chapter 11 on Agribusiness discusses these questions in some detail.

Competition among farmers within Canada inevitably means that some are forced out of business. This is sometimes thought to mean that the most efficient producers (i.e. those with the lowest costs⁴ of production) will remain in farming and the least efficient will move to other sectors. This is not necessarily the case: it is all a question of alternatives. Farmer A may, through superior management, reduce costs of production below those of Farmer B and earn a net income of \$8,000, compared with B's \$2,000. But if A can earn \$12,000 elsewhere and B can earn only \$1,500, it is B who remains in farming.

The widespread condition of competition among farmers within Canada implies that new techniques which reduce costs will be widely adopted. The early adapters receive additional profits and they expand output thus unintentionally exerting the pressure of lower prices on those who have not adopted the technique. Those who refuse to adopt it or who cannot do so because they lack the skill, credit or appropriate other inputs, suffer lower incomes. As indicated in the previous paragraph, they may or may not move out of farming depending upon their alternative opportunities. Eventually, those with low incomes become poor credit risks and have a reduced call on credit and resources. For this reason, if no other, cost-reducing techniques are adopted.

The adoption of new farming techniques which reduce costs of production has been widely regarded by farm leaders and by many economists, as being fully passed along to consumers in the form of lower prices. This line of reasoning states that farmers may gain but only as consumers, not as producers. The same line of reasoning concludes that because there are only a few large firms in many agribusiness fields, the adoption of new techniques may be postponed by agreement (perhaps tacit and presumably beyond the effective scope of the Combines Investigation Act) if it shows signs of reducing the profits of the sector.

This line of reasoning has several flaws. The argument that a new cost reducing farming technique is passed along to consumers in the form of lower prices seems to assume no international trade. If, in fact, Canadian producers could reduce the cost of producing corn, the effect on domestic prices would be small and it would be foreign producers who would suffer through the loss of a very small share of their very large market. The degree to which the advantages of cost reductions would accrue to Canadian producers or to consumers would vary among products. However, since resources can be

⁴ Economists will recognize that here we use the term "costs" in the layman's sense of excluding opportunity costs.

shifted from product to product the tendency would be to shift to those commodities whose prices fell least⁵ primarily those exported or in competition with imports.

The previous discussion debunks to a considerable extent the frequently held view that the competitive structure of agriculture works to the advantage of Canadian consumers rather than producers. What it does not do and what would be totally wrong, would be to cast doubt upon the importance to Canadian farmers, of reducing costs in order to be competitive in export markets and against imports. If Canada were self-sufficient in food, international competitiveness would not be very important but Canada has substantial exports and/or imports of almost all farm products. The case for research and extension in production and marketing is sound in principle.

Large Farms, Small Farms

Whether the contrast of this heading is appropriate⁶ or not, there seems to be a growing disparity of income among farmers, largely but not entirely based on size. In 1966 Canadian net farm income was \$1,978 million or \$4,594 per farm for the 430,000 farms identified in the census of that year. However, 55 per cent of these farms—with gross sales of under \$5,000—accounted for only 14 per cent of total sales. Yet about one-half of the Canadian farm labour force and 29 per cent of farm capital is used on these farms. Chapter 16 of this Report deals with these people as it discusses the Low Income Sector.

The presence of 100,000 to 150,000 farm families at or below the poverty level⁷ in Canada can be explained better by historical accident and technological advance than by perversity of the people themselves or of governments. Historical accident led to the establishment of thousands of families on farms in the older settled parts of Canada where, in the conditions of those times, they provided a satisfactory income and way of life. Changing technology made them marginal and then sub-marginal but the people concerned could not change as fast in their attitudes and capacities as did the economic and technological environment surrounding (and partially submerging) them. It would be improper to criticize such people as perverse in not responding dramatically and at once to change. Dramatic changes are mostly of an inter-generational type, and these, by their nature, take time. They also take patience and understanding and money on the part of those whom historical accident (perhaps a great-grandfather's decision) might have placed on a rocky Nova Scotia farm rather than on a rich \$800-per-acre farm in South-Western Ontario.

⁵ If one assumes an equal percentage reduction in the cost of producing all farm commodities, one would expect the greatest increase in production to occur among those with the most elastic demand curves for the Canadian product.

⁶ The supposedly contrasting terms "commercial-low income", "viable-poverty" sometimes used are less satisfactory.

⁷ See Chapter 16 for estimates and calculations of numbers. The Fifth Annual Review of the Economic Council of Canada estimated that there were 150,000 poverty-level farm families. The estimate in Chapter 16 of this Report is of about 100,000 families.

Some people have applied the label "social problem" to the group of farm families below the poverty line and a contrasting label "economic problem" to the relatively well-off. In themselves such labels may be misleading; certainly the low income folk constitute an "economic problem" just as grave or more so than their more prosperous neighbours. The word "social" has so many uses that it too must be used with care.

Regardless of problems of terminology, it is the Task Force view that the set of programs which would be most desirable for the viable⁸ farms would not be appropriate for those below the poverty line. In this Report, most of the chapters deal with policies and programs relating to viable farms, because, after all, it is these farms or modifications of them which will constitute the farm sector of the future.

While the presence of a substantial low income group of farm families is largely the result of historical accident rather than of perversity of individuals or programs, there are a few programs which have helped perpetuate the low income problem. These include land settlement programs which encourage expansion in the northern prairie fringe areas and Laurentian districts in Quebec, credit provisions which have very small maxima and subsidized rates, and deficiency payments such as those for hogs and eggs which are limited to a small maximum quantity per farm.

The Family Farm

The family farm has given valuable service in opening up and settling the country and has been the backbone of rural society. In addition, it has been credited with being the most efficient unit for agricultural production. There is no doubt that interested and dedicated management and work by the operator and his family have wrought wonders. As we have suggested before, perhaps these contributions were part of the "subsidy" given by rural people to agricultural production; a "subsidy" that is now fast declining and bringing increased costs of production despite handsome improvements in labour productivity.

Moreover, while the average farm operator could operate a small farm business at reasonably low costs, given hard work, dedication, long hours, low returns and a little luck, the situation alters with rapid technological change, low and unstable prices, rising input costs and improving off-farm opportunities for members of the farm family. Inflation and the cost-price squeeze imply that individual farm enterprises must continuously expand and improve efficiency in order to maintain or increase incomes. Unfortunately, many farmers have too small earnings to be able to save or to justify borrowing sufficient amounts to finance the required expansion. They fall further behind in the competitive race, even though they make some improvements in productivity. Those who fall behind tend to receive declining real and relative incomes and may either become part of the rural poor with economically "unviable" farms or be forced out of agriculture altogether.

⁸ "Viable farm", if it means anything, means a farm which, with current management, produces an income greater than the poverty level of income.

A problem for those farmers who manage to keep ahead in the rat-race of the agricultural revolution, is that as they continually expand and improve their farm enterprises in order to remain competitive; their farm businesses become extremely complicated affairs. Many farm businesses become so large and complex that they strain the capacities of a single individual. It is extremely difficult for one farmer to combine all the many skills required, from production technology (crop and animal husbandry, disease prevention, machinery and building operating and maintenance) through managerial functions (budgeting, accounting, production decisions, labour supervision, financing) to marketing skills (interpreting market outlooks, knowing where and when and how to sell). Therefore it is only natural that one sometimes hears the valid criticism that some farmers' financial difficulties are of their own making; borrowing too much, investing in excessively expensive machinery, planting the wrong crops, failing to keep adequate accounts and so forth.

For years there have been alarmist stories about the impending disappearance of the family farm, of huge land acquisitions in Alberta, of the extremes of vertical integration in Ontario, of large livestock corporations in Manitoba and so forth. Occasionally provincial marketing boards have been created with the express purpose of preventing vertical integration and farm amalgamations.

It appears to the Task Force that the family farm is likely to remain the standard form of production unit in Canadian agriculture, modified constantly, of course, but that there are serious threats to family farming as we know it in some areas of poultry and fruit and vegetable production. These threats arise partly from conventional economic forces and partly from farmers' own actions. The conventional forces are those of large volume, low margin, high risk, technically complicated production units (particularly in broiler production) where there is a tendency to follow the route taken by the sector in the United States in which the "farmer" becomes a "contracting producer" and receiving commissions and bonuses.

The threats that are largely of farmers' own making arise when they, through their marketing boards, push up the price of the farm product to such an extent that processors find their margins squeezed in processing but find real profit potential in production. Under such conditions processors of vegetables move into the production phase and find it unnecessary to contract with family farms for the product.

The requirements to be a successful farmer are changing dramatically. It used to be thought (in some cases still is) that physical strength and endurance, a willingness to work hard and a good down payment on a piece of land were sufficient requirements for success. For some, the farm—the family farm—was a refuge from economic and social pressures of urban living. In spite of generally low levels of formal education, farmers have been able to do a remarkably good job of self education: on-the-job training has been common in farming for generations.

The important qualities—strength, energy, initiative—which were sufficient conditions for success in the past are no longer sufficient. The increased technological and business complexities of the size of farm required for success make increased formal and technical education necessary. The 1961 Census indicated that 70 per cent of farm operators had not completed Grade 9; only one out of 250 had a university degree.

Forty years ago the differences among farmers were fairly small; today there is a farming “elite” of large-scale business-oriented, technically-experienced operators who are increasingly set apart from the rest. The difference between membership in the elite and in the poverty categories is not so much a matter of differences in intelligence and physique as in education and experience.

Protection Versus Free Trade

Governments often tend to give protection and subsidies to those sub-sectors of agriculture which are high cost and to leave unsubsidized those which are low cost, thus tending to move resources from low cost to high cost sectors. This applies not only within agriculture but across various sectors of the economy. Some sectors do not enter directly into international competition, either because they are service industries, or because the commodities produced are expensive to transport or are subject to government regulation.

Agriculture is heavily dependent upon and vulnerable to international trade and competition. With a number of exceptions⁹ inputs purchased by farmers or used in agribusiness are free of import tariffs. Where agricultural people rightly feel a sense of injustice is in regard to the high tariffs on many manufactured goods, “voluntary” quotas on Japanese exports to Canada, the National Oil Policy and so forth, all of which either tend to raise Canadian prices and costs or reduce the accessibility of foreign markets for Canadian exports.¹⁰

It is evident that Canadian agriculture has made the most remarkable adjustments in the face of technological change, foreign protection of agriculture and limited domestic assistance. If the Canadian manufacturing industry has not yet made the adjustments necessary to become internationally competitive, it would seem to be in the best interest of the economy that such adjustments be encouraged by greater international competition.

Bargaining power

The fact that agriculture is competitive in two senses—of there being many small competing producers and of competition with producers in other countries—makes the issue of “bargaining power” particularly relevant to farmers. Essentially “bargaining power” involves the ability to influence prices by

⁹ For exceptions see the Appendix to Chapter 4.

¹⁰ As a counter-weight to such feelings of injustice, however, farmers must consider the complete embargo on butter imports, high tariffs on tobacco, poultry, fruits and vegetables and Canadian Wheat Board licensing of wheat, oats and barley imports.

affecting supply. Obviously one hog producer has little bargaining power when his output is perhaps 1/1000 of the quantities purchased by each of the small number of processors to whom he may have access. Under such circumstances bargaining power is unequal. The same applies to purchases of machinery and of course to many non-agricultural acquisitions such as buying groceries, obtaining dental care and so on.

To farmers the importance of bargaining power has increased with the increased commercialization of their operations whereby they buy larger and larger proportions of the inputs required in production. In marketing they find ever fewer and larger firms.

As farmers note the remarkable increases that have occurred in the wages of carpenters, plumbers and other unionized tradesmen, as they watch postal workers strike for and obtain substantial increases without any apparent increase in productivity, as they see university professors' salaries rise without any clear-cut reference to supply and demand and as they see tax concessions to oil companies, subsidies to gold mines, foreign aid loans or grants to purchase Canadian electrical generators and a host of other activities which result in incomes very different from those which would have been determined by the free play of market forces, it is not unusual that farmers should wonder why *their* product prices (and their incomes) should be determined in an atomistic market where, individually, they have no bargaining power.

Action has taken three main forms: one is to attempt to work *within* the market system through farm supply and marketing co-operatives and through teletype selling of products; a second is to work *on* the market through compulsory collective bargaining, output or sales quotas and two-price systems; the third had been to seek *government* intervention and assistance in the form of subsidies. Later chapters in this report deal with programs arising from these three approaches.

Food For The Hungry of the World

Canada has provided considerable food aid, mostly wheat, primarily on a bilateral basis. Contributions made through the World Food Program and as agreed in 1969 under the International Grains Arrangement, were valued at \$333.7 million up to March 1969. Food aid donations tend to increase when stocks are burdensome.

In a research paper prepared for the Task Force, Professor P. J. Thair made the following comments:

An understandably popular goal with farmers is that of feeding the starving millions of the world. The logic is simple. Match up the problem of surpluses in this country, or North America, with the problem of hunger in many parts of Asia, and lo, both problems would be solved. In this way farmers' humanitarian instincts would be fulfilled at the same time as their incomes would be raised.

Unfortunately, instead of being the answer to both problems, such food gifts in perpetuity would be the answer to neither problem.

- (a) The surplus problem at home is part of the overall basic problem of redundancy of human resources in agriculture resulting from advancing technology. Even if we could persuade our taxpayers to make massive gifts of food abroad in perpetuity it would do nothing about this basic problem at home. Three hundred thousand farmers in Canada can produce as much food as five hundred thousand, and gifts of food abroad would do nothing towards making productive, rewarding lives for the other two hundred thousand.
- (b) The hunger problem abroad cannot be solved by gifts of food from the surplus areas. Gifts of food on a temporary relief basis are one thing, but perpetual and permanent transfers of free food are exactly what the starving peoples don't need.

Implementation of policies always has to begin from where you're at; and where these hungry nations are at is in peasant farming. What these people need is to have their own productivity (in food production) raised to the point where overall economic development can occur. Continual imports of free food would wreck the price structure and incentive for their farmers, and permit their population to grow still faster on the free food thereby creating still more hungry people. What these countries need is complete economic development, assisted by temporary, judicious, food relief, and accompanied by population control and education. And when this has been accomplished they may well become competitors of ours as food exporters, rather than importers.

If a man is hungry do you give him a fish, or do you teach him how to fish?

These comments express the view of the Task Force. Feeding the starving, hungry or undernourished is a laudable act. To countries with "Surplus" food stocks the laudible act becomes also an attractive political tool. To farmers with surplus production on their farms or facing depressed prices in home markets because of abundant harvests, the thought of people going without food is frustrating economically and unacceptable morally. Food gifts are unfortunately not the expected panacea. Surpluses at home are the consequence of too many resources in agriculture in specific areas. Gifts are a direct outgrowth of inappropriate distribution of resources. Hunger abroad is not solved by perpetual donations but by overall economic development based on the less developed countries' productivity. Gifts can ruin the price structure and incentives for local farmers and/or can promote population expansion beyond the capacity of local resources to support it. Food aid must be temporary, judicious, genuine relief and accompanied by population control and education if possible; it does not offer a solution to our problem of surplus.

RECOMMENDATION

1. The Task Force recommends that publication of the Canadian Price Index of Commodities and Services Used by Farmers be suspended until it has been updated to truly reflect the costs of inputs.

chapter three

GOALS

INTRODUCTION

Any rational attempt at the formulation and implementation of policy must begin with an examination of the goals sought. As we emphasize in Chapter 11, the operational functions of any government, farmer or agribusiness organization are to anticipate problems and opportunities, plan how to meet them, implement plans and evaluate results. These are “operational functions” but even prior to operations or action must be consideration of the goals or objectives sought.

Goals are objectives or ends desired by individuals or groups. *Policies* are decisions that certain goals will be sought following agreed-upon courses of action. *Programs* are specific courses of action, sometimes legislative, designed to achieve these goals and thus be in accord with policy decisions. On the basis of above definitions *agricultural policy* implies both a goal or series of goals and a series of programs which help to achieve those goals.

A study of goals is essential to the ratification of policies and better understanding of programs. The contribution of programs is related to the achievement of particular goals and makes it easier to identify conflicts among goals and among programs. To state explicitly what are one's goals permits a better diagnosis of problems, a clearer classification of priorities and provides a better basis for agreement concerning various problems and policies.

There is a sequence to be followed. If everyone agrees on the goal in a given situation, it is possible to start discussing the most effective way of

achieving it. If there is no agreement on a particular objective then a higher level objective must be agreed upon and negotiations started from that level.

The Task Force accepts the rational realization of each individual's potential as the ultimate goal. This statement is not so general nor so non-wordly as it might at first appear. It implies that in the ultimate analysis it is individuals that count rather than organizations, that governments exist to serve people, not the opposite. It means too, that it is "the whole man" which has to be considered and not just the "political animal", the "economic man", the "social being" or the religious soul. Pursuit of this ultimate ideal occurs in a highly complex society with many different lower order goals in apparent conflict. The conflict is sometimes between political and economic goals, sometimes between social and psychological, and also between two or more economic goals and between different political goals and so on.

This Report is largely oriented toward economic problems and their solution, but not exclusively so. The Task Force is well aware that economic welfare is only one of many goals. There can be no doubt of the importance of social and psychological and other values; as individuals and as groups we know that economic success can by no means be equated with total success. Nevertheless, there is something particularly appropriate in Boulding's position:

The hopes of mankind do not have to be confined to another world. A Human society is conceivable in which the evils of poverty are completely eradicated and in which there is sufficient production of this world's goods to enable everyone to live in health and decency. This is the proximate end toward which economic progress moves. It is not a sufficient end as every religion testifies. But even if the chief end of man is to know God and enjoy Him forever, the enjoyment of goods is surely not inconsistent with the enjoyment of good and God is better served by a race whose capacities are not stinted by inadequate food, clothing, shelter, education or health.¹

Planning a better agricultural sector in the Canadian economy pre-supposes change. The criteria for judging change must include all kinds of human values and must include other disciplines as well as economics. At no point should the welfare of individuals be ignored; one must remember that when he is talking about wheat production he is really talking about thousands of individual wheat farmers and when he is talking about "The Treasury" he is referring to taxpayers and when discussing dairy processing he is concerned with 1,100 large and small firms and their employees. The question must be resolved as to how resources can best be used for the optimal development and satisfaction of individual needs and faculties with a minimum of effort and misery. Are the economic benefits to all individuals in society worth the dislocation costs and heartaches to the individuals directly concerned? Does "mobility of labour" for example, have a dark side in terms of family and psychological problems—problems which may result ultimately in considerable economic cost to society?

¹ Boulding, K. E. "Economic progress as a goal of economic life", from *Goals of Economic Life*, edited by Ward Harper, New York, (1954), p. 72.

The Task Force has concentrated its efforts on the pyramid of economic goals (Figure 1) most directly relevant to rural Canada, keeping very much in mind the human values discussed above within a general social framework in order to arrive at a workable and acceptable agricultural policy for the 1970's. The lower level goals will be seen to be means of achieving higher level ones above them. Each level is a goal to the level below it and a means to the level above it. The generally accepted national economic goals set out in the First Report of the Economic Council of Canada (1964) are indicated on the first and second level. The Task Force has added "higher net farm income per capita" on the second level of goals. The third and fourth levels are more selectively concerned with agriculture and rural Canada.

PYRAMID OF ECONOMIC GOALS

First level economic goals

A high rate of economic growth, indicated as higher national income per capita in Figure 1 is a primary objective which allows the economy to spend more on education, health, long term development and the reduction of poverty. Only higher rates of productivity can lead to higher per capita income. No amount of sleight-of-hand in manipulating prices, wages or statistical data will improve per capita income.

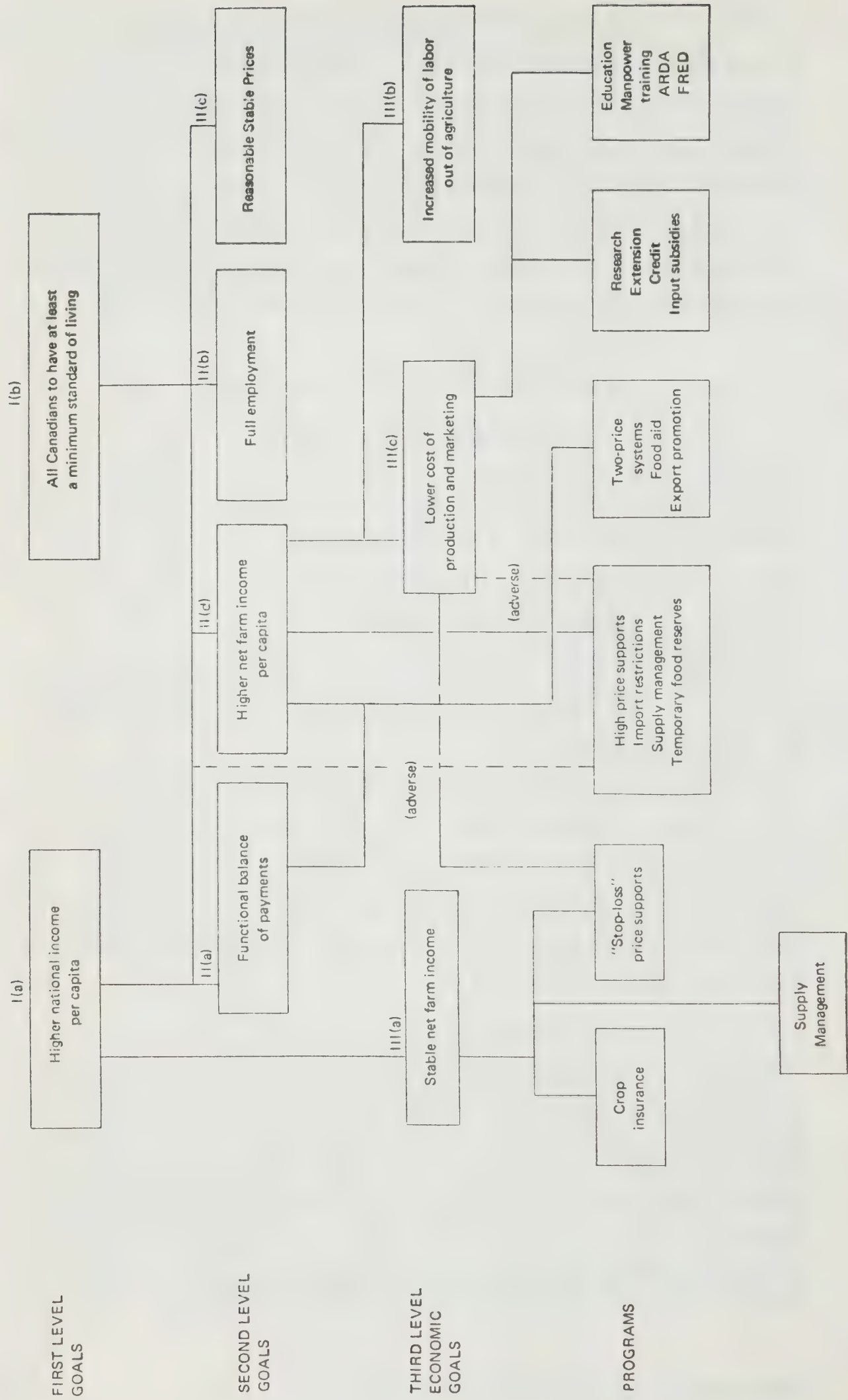
Advancing economies permit a rise in incomes including total farm income. Nevertheless, as incomes rise, farm income falls as a percentage of national income and the farm labour force declines in numbers and as a proportion of the total labour force.

Farmers must be included in the first level goal to *provide all Canadians with a minimum standard of living*. Ensuring that all Canadians can afford at least a specified standard of living implies that incomes received by individuals will not be identical with their productivity as measured in the market place. Progressive income taxes, welfare payments and other measures redistribute income from those with high to those with low incomes. There is a profound and complex issue here in the possible conflict between growth and more equal income distribution.

Second level economic goals

Canada's balance of payments must strike an equilibrium if the country's economy is not to suffer from spending far more abroad than it earns from foreign income sources. Programs which expand exports or reduce imports do not automatically help to improve the balance of payments; for example imports could be reduced by producing all our requirements of fresh fruit and vegetables but the resources required to do so could be better employed in other uses. Agricultural exports earn a great deal of foreign exchange since about 25 per cent of Canadian farm output is exported. If agricultural

FIGURE 1 ECONOMIC GOALS



exports are to continue to aid our balance of payments in the future Canadian products must be competitive in world markets. Competitive efficiency in domestic and trade policies are therefore a prerequisite.

Reasonable price stability

Inflation pilfers purchasing power. Inflation can lead to adverse balance of payments and can reduce economic growth. Farmers have made important contributions to price stability in Canada over the years. Between 1949-67 the Index of the Prices of Farm Products rose only 19 per cent compared with 49 per cent for the Consumer Price Index and 32 per cent for the Wholesale Price Index.

Full employment

One hundred per cent full employment is impossible. High levels of unemployment such as the seven per cent rate experienced in Canada from 1957-62 means slower economic growth. Some trade-off between full employment and price stability has to be struck.

Higher net farm income per capita

This goal is particularly relevant since the degree of poverty found by the Economic Council of Canada was much greater in rural Canada² than in the rest of the country.

Third level economic goals of import to agriculture

Stable net farm incomes are to be distinguished from higher per capita net farm incomes. Wide fluctuations in price and wide variations in yield cause unstable farm incomes. The income of an individual farmer is even more unstable. Elimination of uncertainty promotes improved planning by individuals, lower costs and greater security for credit. The three-year hog cycle and two-year egg cycle of production are costly, resulting in the build-up of breeding stock, farm buildings and packing plant and cold storage facilities to meet peak production; some of these must be liquidated or become unused capacity when the low point in the production cycle is reached a year or two later.

Increased mobility out of agriculture

The farm labour force has fallen by 55 per cent between 1946 and 1968 in spite of many unfavourable circumstances. These included unemployment averaging almost seven per cent from 1957 to 1962, no effective manpower training programs or ARDA until a few years ago, perverse immigration policies that gave preference in the early post-war years to farm labour and the attitude of farmer organizations and leaders who were loathe to recognize

² The E.C.C. estimated 150,000 out of 275,000 farm families were in the poverty range in 1961. (Fifth annual review E.C.C., Page 109)

the need for a widespread exodus from farming. Increased mobility out of farming helps to achieve a higher per capita net farm income for those left in farming while at the same time obtaining better paid employment for those who leave agriculture. Increased mobility out of agriculture does not necessarily involve a move out of rural communities or regions.

Lower cost of production and marketing

Farmers bid against non-farmers for goods and services to produce commodities. In selling the commodities produced, farmers must compete for consumer dollars in the open market. Farmers are critical of those who urge them to be more efficient when the critics themselves are employed in an industry or profession in which their own efficiency is not subject to competition. However, in a competitive world, those who are satisfied with yesterday's standards of performance cannot expect even yesterday's income. The inexorable pressure of increasing efficiency will not let anyone rest on previous performance.

Agricultural products are sold abroad only if they are competitive in price and can surmount tariffs, variable levies and export subsidies given by other countries. Being competitive entails being efficient. There is no alternative. Canada is in no position to compete with the United States in export subsidies. American farm exports are only three or four times as large as our exports but U.S. national income is 16 times as large as Canada's.

The criterion of efficiency should be applied to all sectors of the economy. When Canada exerts pressure on Japan to impose "voluntary quotas" on her exports of textiles to Canada there tend to be ill-effects on Japanese imports of our farm products and other commodities.

Lower costs contribute to higher per capita net farm income, partly because competition leaves fewer farmers among whom income must be distributed and partly because a good deal of Canadian output is exported or goes to reduce imports. A drastic cut in cost of production of beef and rapeseed would increase exports without proportional reduction in price. Similarly a 25 per cent cut in corn production costs and a doubling of output in Ontario would greatly increase income because prices (based on the U.S. market) would not fall by anything approaching one-quarter.

To whom do the benefits of increased farming efficiency accrue? Some economists would have it that benefits are passed along entirely to consumers. They reason that farming is a highly competitive industry with many producers each attempting to reduce costs. Production is expanded, prices reduced and other farmers are forced to adopt the new techniques. The consumers are the ones who benefit from lower prices. The argument implies that Canadian expenditures on agricultural research, extension, credit and other inputs are part of a "cheap food policy" and of no benefit to farmers. This sweeping generalization does not take into account that for most products Canadian farmers compete with producers elsewhere. If costs can be reduced and on this basis sales expanded, higher incomes accrue to Canadian farmers. Even

for products which do not enter world trade, efficiency will move resources directly or indirectly into production of export or import-competing farm products.⁸ If our marketing institutions are not allowed to become excessively rigid, a major expansion in output could be marketed through exports or reduced imports, even though barriers may be raised against our exports in some cases.

The above discussion refers to all of agriculture—to agribusiness and government operations as well as farming. Many sectors of agribusiness have experienced tough competition just as farmers have; for example the number of dairy processors has fallen by about 35 per cent between 1961 and 1969.

There is one respect in which lower production and marketing costs in farming may work against achieving the goal of a minimum standard of living for all Canadians. Those who cannot make the adjustment required within farming and are unable to leave for non-farm employment could find themselves in extreme poverty and worse off than before the dynamic changes took place.

Goals in Conflict

Critics of government policies point to obvious inconsistencies in which policies for the promotion of efficiency and policies of equity and compensation exist side by side and in direct conflict with each other. During the early stage of economic development the aims of consumers and farmers are often complementary and policies may be beneficial to both at the same time. Increased agricultural production may be of direct benefit to both, more food at reasonable prices to consumers, higher production and incomes for farmers and more markets for services and industrial goods. As economies mature, however, the various sectors may find their aims in conflict. Policies to promote increased food production will benefit consumers but may result in lower incomes for farmers, unless other markets outlets (exports) can be found.

Within agriculture, too, one finds livestock feeders wanting lower grain prices in opposition to grain producers and dairymen in opposition to soy-bean and rapeseed growers and one finds competition among milk processors. The potential for conflict in goals or sub-goals is unlimited.

SOME POPULAR GOALS

The Family Farm

The "family farm" has long been presented as a goal by politicians and others seeking to win friends among rural folk. Yet it is becoming a more qualified goal. For instance James Bentley, then first vice-president of the

⁸ In technical terms, the comment refers to elasticity of demand for farm products. What is relevant is the elasticity of demand for the *Canadian produced commodity*, including both domestic and foreign markets.

Canadian Federation of Agriculture said in 1959, "The long term objective of agriculture in Canada should be the development of rural communities based upon the maintenance of the family farm". In 1969 Charles Munro of the C.F.A. changed the emphasis to "economically viable family farms". A believer in the amended definition is placed in the same position as the chain store planners, industrial conglomerate organizers and holding company executives. Success can be had only by having fewer units. That is the only way to have family farms capable of a decent income to have fewer of them.

Recognition that the family farm is not a goal in itself but rather a means to higher goals of income, personal fulfilment and various social and cultural values, presents a solution. An examination of the "farm run by a family" can reveal to what extent it was and is a suitable means for achieving the higher objectives quoted. The rational approach is to clearly define the major goals toward which the family farm was supposed to contribute and see how these farm goals can be achieved by other alternative means before it is too late.

Efficiency

The word "efficiency" has become a dirty word to many farmers and their organizations. Economists are accused of holding efficiency as a goal and recommending that farmers be sacrificed on its altar.

The word "efficiency" is a perfectly good word and can have a precise meaning, generally expressed in terms of output related to input. Efficiency is a means to the end of increased levels of income and economic well-being. Increasing efficiency is the source of economic well-being developed from the precarious livelihood of the caveman to the point now where man *knows how* to obtain freedom from want. The aim of increased efficiency is not to make people work *more* but on the contrary to allow them to work *less* and obtain greater reward for a given amount of labour.

Income is closely related to business survival, in farming as in other industries. The irony is that the survival of farms, especially those capable of financing a "way of life", depends upon increased efficiency. Progress cannot be stopped even to reduce the number of casualties caused by technological innovation. Progress is powered by the curiosity and initiative of human nature. As long as anyone is free to use imagination, new labour-saving techniques result. Eventually other farmers must follow suit or suffer sub-standard incomes as they become relatively less efficient.

Regional Development

Within one nation great disparities between regions will become less and less acceptable. Regional development will likely continue to be a special national goal but specific equalization policies, developed to achieve this objective, often bring complaints from those who have to pay most for them. Agriculture lends itself to a limited amount of regional variation in (otherwise) national policies.

Cheap Food

Earlier in this chapter we have noted that there is a widely held belief that greater efficiency by farmers and agribusiness benefits only consumers. This argument is used as the basis for statements that governments' support of research, credit, extension and so forth are all part of a "cheap food policy" which is designed to benefit consumers, not producers. There is some truth in that part of the argument which says that consumers as well as producers benefit from lower costs. But if governments had unequivocal cheap food policies of the kind implied by these cynical critics, we would have no embargoes on butter, no taxes on margarine, no two-price systems on white beans, no offer-to-purchase support prices on skim milk powder.

In a somewhat different sense from that usually implied in the term, a "cheap food" policy is very desirable; in this sense "cheap food" means low cost farm supplies obtained competitively from the cheapest source, low cost farm production, low cost processing and marketing. This kind of cheap food policy makes good sense.

GOALS, POLICIES AND PROGRAMS

In this Report the goals of Figure 1 have a prominent place. In the context of these goals and current or expected conditions, we examine a host of policies and programs and the institutions involved in them and prescribe amendments which show promise of more effectively achieving these goals. Take, for example, the case of prairie wheat, now in distressing abundance. In Chapter 5 we propose a very short run *Transition Policy* with two component programs—wheat acreage diversion payments and amended delivery quota acreages—all aimed at the specific goal of eliminating the current surplus of wheat and deficit of cash on the Prairies. This goal, however, is a means and prerequisite to another goal—ensuring freer more flexible *New Marketing Guidelines* for the longer run. These in turn serve as means to achieve several of the goals of Figure 1. Other programs and lower order goals must be related to and harmonized with the Transition Policy and New Marketing Guidelines to create an integrated sectoral and then national agricultural policy.

In this Report we have ourselves attempted to follow the kind of scheme discussed in this chapter. We propose a new program here and an amended program there to achieve a desired goal for wheat (short run and then long run), for dairy, for each main product. We build in non-commodity programs and institutions for credit, national marketing boards, poverty-level persons, continental (U.S.-Canadian) markets and so forth. These become inter-related and inter-dependent parts of sectoral policies and then of a national policy for agriculture. Take away any one of the programs and the remainder would be affected. This aggregation and integration we see in tangible form in

Chapter 10. The institutional-administrative-consultative integration of national agricultural policy appears in Section 5 of Chapter 11. Herein lies the framework to clarify responsibility and to trace out the advisory-consultative structure.

REALITIES

Goals for agriculture must be assessed in the perspective of the realities from which they derived.

1. It is in the interest of the nation, of agribusiness and of farmers, that Canadian farm products be as competitive in price and quality as possible in international markets. The means: (goal)—Lower cost of production and marketing.

2. Agricultural programs which try to serve the interests of commercial farmers and to meet the problems of poverty-level farmers are unlikely to be as successful as separate (though co-ordinated) programs designed to serve each. The means: Task Force position on credit, dairy and the low income sector are examples.

3. Regional disparities exist and will persist. Different policies are required for different regions and different problems. The establishment in 1961 of ARDA was an important step in principle and fact, recognizing regional disparities in Canada. The means: Proposals on credit, dairy, feed grains and low income sector contain possible variations by regions.

4. Farmers are vulnerable to sudden changes in natural conditions and in prices. It is in the national interest as well as in the interest of farmers to reduce instability by favouring the achievement of a stable net farm income. The means: Crop Insurance, stop loss price supports, some forms of supply management and the Prairie Grain Price Stabilization Program, among others.

5. Farmers, being large in number but small in size individually, have very limited bargaining power in the market place, whether buying or selling, unless they are organized. The means: Countervailing power through co-operatives and marketing boards and employing teletype selling, collective bargaining and two price systems.

6. Farm prosperity is important to agribusiness and other sectors of the economy, just as the prosperity of the other sectors is important to farming. Growing interrelations make it imperative for agricultural policy to be linked with national policy, national considerations and national scrutiny.

7. In discussions of farm policy goals are often neglected. Without systematic emphasis on goals, logical choice of programs is difficult and evaluation of existing programs faulty. The remedy lies in the means: Farmers, agribusiness and governments must assume the responsibility for defining goals and to see to it that they are used in appraising programs.

RECOMMENDATIONS

1. All major stakeholders in agriculture should define their goals explicitly, indicating in quantitative terms wherever possible what it is that they regard as objectives. Such stakeholders include the two main farmer organizations, agricultural colleges, agribusiness trade associations, and other bodies which regard themselves as major stakeholders in agriculture.

2. The Department of Agricultural Industry (now Canada Department of Agriculture) should act as the initial catalyst to request a statement of goals from these organizations. These statements should be of value in creating the National Agricultural Advisory Council (N.A.A.C.) and the various commodity councils proposed in Chapter 11.

3. Thereafter the N.A.A.C. should sponsor periodic conferences on these expressed goals of major stakeholders and on the subject of "management by objectives". The process of definition and specification of goals by the stakeholders in the system must be a conscious and continuous one. Dispersion of interests in agriculture makes it imperative that the N.A.A.C. in consultation with the Department of Agricultural Industry be prime-mover of the recommended system of evaluation of goals and management by objectives.

part two

COMMODITIES

chapter four

INTERNATIONAL TRADE

INTRODUCTION

International trade in agricultural products is of vital importance to the Canadian economy. Agricultural exports account for about 15 per cent of Canada's total exports. These represent an important contribution to sustaining our balance of payments position. More important there are the opportunities to improve this position by enhancing the competitive position of Canadian agriculture and by the use of appropriate trade policy objectives and strategies.

Some countries are motivated by the desire for self-sufficiency, or use restrictions on food imports to handle balance of payments problems. But there are in all countries motivations for greater efficiency, improved resource use and a higher standard of living. It is in such contrasting policy climates that Canada must pursue her objective of expanding exports of farm products.

AGRICULTURAL TRADE IN PERSPECTIVE

On the basis of combined imports and exports Canada is the fifth most important trading nation in the world. On a per capita basis this country ranks third in the world. Commodity exports yield about 20 per cent of our national income. Maintenance of a high level of exports is most important to our standard of living and thus trade policy has a high priority on the list of economic and political issues of the nation.

The following tabulation relates the importance of 1966 total exports and agricultural exports in the Canadian economy to that of other selected countries.

TABLE 1
Relative importance, Agricultural to Total Exports Selected Countries 1966

Country	Exports, U.S. \$ Millions		Exports, % GNP		Exports per Capita U.S. \$	
	Total	Agricultural	Total	Agricultural	Total	Agricultural
Canada.....	9,585	2,050 ¹	17.8	3.8	478.17	102.16
United States.....	29,899	7,125	3.9	0.9	151.80	36.18
Denmark.....	2,402	1,287	21.6	11.6	504.83	270.49
Australia.....	2,950	2,047	11.7	8.1	255.61	177.36
Argentina.....	1,593	1,474	9.8	9.1	70.20	64.95

SOURCE: United Nations, Monthly Bulletin of Statistics Agricultural Trade and F.A.O. Trade Yearbook, Rome 1967.

¹ The apparent discrepancy between this figure and the corresponding one in Table 2 lies in the use by the United Nations of a wider classification of products as "agricultural" than that used by the Task Force.

International trade exists because of differences among countries in natural resources, kinds of labour and levels of skills, technical knowledge and know-how. Generally, international specialization and trade, just like specialization and trade between individuals in any one country, increase productivity and the standard of living of both buyers and sellers. Perfectly free international trade, however does not operate because individual countries use restrictions on trade for internal reasons. The Task Force is very conscious of the historical reasons why Canada erected tariff barriers. Early on tariffs were an instrument of "National Policy" countering the pull of geography to the south. Much of our secondary manufacturing industry owes its start to tariff protection. Several important sectors of our agriculture are also protected by tariff and non-tariff barriers—a fact many in Canada tend to gloss over as they denounce other countries employing similar devices.

The Canadian dairy industry is protected by the requirement of import permits on butter and cheddar cheese and by moderate to high duties on other products, e.g. 3½ cents per pound on fancy cheeses. Importation of wheat, oats and barley is under Canadian Wheat Board import permits; the duty on corn is eight cents per bushel and on mixed feeds five per cent. Fruits and vegetables grown in Canada are under a complex system of seasonal duties and seasonal free trade. There are also anti-dumping procedures and surcharge techniques to meet injuries from imports to mention only a few. In

spite of all these restrictions Canada is still recognized as having fewer restrictions on agricultural trade than almost any developed country.

Tariffs were estimated to cost Canadians one billion dollars per year¹ in higher prices and loss of efficiency as long ago as the mid-1950's. Even in the face of this staggering figure, Canadians recognize that *some* of the benefits from our tariff structure may well be worth the cost paid. Nevertheless in many areas Canadians lose more than they gain by maintaining tariffs. The traditional idea that exports are a blessing and imports a necessary evil result in the view that in international negotiation any reduction in one's own tariff represents a loss, a loss to be offset by a reduction of the tariff of other countries. This notion is frequently in error. The general policy position of the Canadian government should be one of continually initiating and responding to negotiations, (e.g. Kennedy Round) toward mutual lowering of tariff levels and the reduction of non-tariff barriers to international trade.

There are benefits to be gained from international trade but country after country still attempts to solve internal agricultural problems and raise the income of its farmers by restraints on trade. Domestic farm policies and trade policies are becoming ever more closely related. Canada, apparently the most efficient wheat producer in the world,² has seen her historical commercial markets in importing countries decline as a consequence of restraints on imports and competition from subsidised exports by other countries. The low cost producers such as Canadian wheat growers and New Zealand butter producers often face the toughest competition in the world—other nations' treasuries. Restrictions on trade have thereby contributed to the slowing down of efficient development of agriculture in the world. One might illustrate from the Canadian dairy industry if Canada faced fewer trade restraints against those products for which she has a clear competitive advantage (wheat, oilseeds, live cattle, cheddar cheese, some fruits and vegetables and some meats) there would be no arguable basis for our 40-year virtual ban on butter imports and our present costly dairy subsidy program. Other agricultural exporting countries have comparable problems and have reacted more strongly in protectionist terms than Canada. Farmers, faced with restricted markets for the product they produce best tend to move into alternate production for which they demand restrictions and/or subsidies. Canadian restrictive policies have developed more as a result of restraints in international trade than any other single factor.

Agricultural industries of efficient producing countries everywhere are confronted by a jungle of laws and regulations (in importing and exporting countries) aimed largely at raising the level of prices and incomes of farmers. The regulations take the form of tariffs, price supports, production-control programs, import quotas, levies, export subsidies, credit for surplus disposal,

¹ J. H. Young, *Canadian Commercial Policy*, Ottawa, The Queen's Printer, 1958 p. 73.

² Conference on International Trade and Canadian Agriculture, Ottawa, the Queen's Printer, 1966, pp 109-119.

state trading and international commodity agreements. Throughout the history of post-war trade negotiations, beginning with the General Agreement on Tariffs and Trade (G.A.T.T.) agriculture has been given "special status" originating largely as an American position, a euphemism indicating that it has been largely exempted from such negotiations.

The Gordian knot to be unravelled by Canadian policy makers is whether to pursue similar protective policies at heavy cost to the nation or to let our agriculture suffer and decline. These are the facts of life in the area of agricultural trade and while they may be deplored, most of them will remain with us, some may even become worse in the interval to 1980.

Although Canadian agriculture has considerable protection, the Task Force was frequently and forcibly told that only the farmer and the poor are unprotected while almost all other sectors of the Canadian economy—unionized labour, the professions, manufacturing industries and many service industries (through agreements or through government regulation of prices) are highly protected. Though not fully correct, there is much truth in this argument.

Within agriculture conflicts of interest in trade policy exist between livestock and poultry producers wanting cheaper corn and Ontario feed grain producers seeking reduced U.S. corn imports, between eastern potato growers wanting free trade and western potato growers opposing it, and so on. Trade policy conflicts also exist between agriculture and other economic sectors, as illustrated in the area of inputs purchased from protected industries and in the Canadian use of quotas against some Japanese imports. While there are exceptions, Canadian farmers have improved their productivity sufficiently that they can better compete internationally than can many of our industries. Further initiatives toward lower tariffs are recommended. It would be crippling for agriculture (which exports 25 per cent or more of its output) to propose a program of self-sufficiency.

In spite of all the barriers to trade in agricultural products there has actually been a large increase in the value of agricultural exports from Canada over the past ten years. Table 2 presents data on the 15 major agricultural commodities or commodity export groups which accounted for well over 90 per cent of Canada's agricultural exports in 1967-68³. The values presented in Table 2 reflect more accurately the importance of exports to Canadian agriculture than other published series. On the same basis export value figures over the years have been impressive: 1957-58, \$903 million, 1963-64, \$1,424 million and 1967-68, \$1,326 million (calendar year averages).

³ The catch-all category (other agricultural exports) includes about 200 commodity items as classified in the Dominion Bureau of Statistics *Trade of Canada* and testifies to the diversity of Canada's agricultural exports. The 200 items range all the way from baby chicks to pelleted screenings each with export values in 1968 in excess of \$100,000. The category includes malt and brewer's grains but excludes whiskey, breakfast cereals, pickles, soups and other products which have a very small agricultural content.

TABLE 2
Canada, Major Agricultural Exports, Annual Averages for Calendar Years,
by Destination, 1957-58, 1963-64, 1967-68

Commodity	U.K.	U.S.A.	E.E.C.	Japan	Others	Total
(thousands of dollars)						
Wheat and Wheat flour						
1957-58.....	162,766	18,072	108,616	58,786	131,168	479,408
1963-64.....	176,131	13,673	122,022	104,473	563,492	979,791
1967-68.....	120,687	1,022	112,639	101,444	435,310	771,100
Oats						
1957-58.....	1,966	14,095	112	—	1,630	17,703
1963-64.....	1,143	3,037	10,306	—	2,434	16,920
1967-68.....	308	2,557	460	103	1,699	5,126
Barley						
1957-58.....	33,288	20,473	5,524	10,529	3,007	72,820
1963-64.....	10,509	9,997	2,244	3,219	11,921	37,889
1967-68.....	8,104	8,493	16,330	14,898	8,474	56,326
Rye						
1957-58.....	136	3,484	1,697	—	425	5,743
1963-64.....	256	1,893	4,405	39	971	7,563
1967-68.....	517	1,011	1,290	4,793	1,505	9,115
Flaxseed						
1957-58.....	19,928	13	23,157	8,357	3,448	54,903
1963-64.....	15,142	5	9,411	12,890	6,163	43,611
1967-68.....	9,429	7	11,654	13,396	6,781	41,267
Rapeseed						
1957-58.....	250	6	11,944	836	171	13,205
1963-64.....	214	189	1,784	9,591	1,377	13,154
1967-68.....	64	143	6,580	25,077	4,524	36,388
Potatoes Fresh						
1957-58.....	1	4,468	6	—	3,429	7,904
1963-64.....	—	3,296	656	—	5,550	9,504
1967-68.....	4	3,769	210	—	6,073	10,056
Apples Fresh						
1957-58.....	2,312	2,928	1,000	—	900	7,141
1963-64.....	4,668	5,323	157	—	1,564	11,712
1967-68.....	3,607	8,705	177	—	2,259	14,748
Seeds for Sowing						
1957-58.....	2,053	6,782	1,467	1,391	594	12,287
1963-64.....	2,286	11,626	1,053	91	1,094	16,148
1967-68.....	1,528	8,281	896	377	2,550	13,632
Tobacco						
1957-58.....	15,385	—	1,838	—	2,999	20,222
1963-64.....	26,112	239	3,012	10	4,091	33,464
1967-68.....	45,880	694	651	—	3,393	50,617
Live animals						
1957-58.....	143	75,666	62	—	1,245	77,116
1963-64.....	65	32,690	769	173	2,622	36,325
1967-68.....	217	39,551	1,468	740	5,802	47,777
Meats and meat products						
1957-58.....	650	42,853	1,338	4	4,969	49,813
1963-64.....	5,058	33,315	1,519	25	7,896	47,815
1967-68.....	5,597	52,299	3,108	289	9,227	70,519

TABLE 2 (conc.)

Commodity	U.K.	U.S.A.	E.E.C.	Japan	Others	Total
(thousands of dollars)						
Hides and skins (agricultural)						
1957-58.....	1,727	3,846	4,363	1,007	1,122	12,064
1963-64.....	567	3,576	4,723	718	3,629	13,213
1967-68.....	712	4,753	5,913	2,690	8,710	22,777
Cheese						
1957-58.....	3,664	245	32	—	99	4,041
1963-64.....	6,836	227	32	—	3,008	10,103
1967-68.....	12,241	707	23	—	776	13,746
Other agricultural exports						
1957-58.....	6,975	36,841	1,700	51	23,262	68,829
1963-64.....	51,763	52,681	11,548	4,623	26,301	146,916
1967-68.....	35,237	60,135	10,292	19,625	37,475	162,764
Total agricultural exports						
1957-58.....	251,244	229,772	162,756	80,961	178,468	903,201
1963-64.....	300,750	171,769	173,641	135,853	642,114	1,424,128
1967-68.....	244,132	192,137	171,691	183,431	534,558	1,325,948

SOURCE: Compiled from *Trade of Canada, Exports by Commodities*, D.B.S., Annual Issues.

Exports

Canada's three largest agricultural product markets—The United Kingdom, U.S.A. and European Economic Community have hardly grown at all. Increase in exports is almost entirely to Japan and "other" countries. Sales of wheat to Socialist countries and food aid to less developed countries have been of greatest importance here.

Wide year-to-year fluctuations of the magnitude of \$100-300 million are another disturbing feature of the Canadian agricultural export trade. Regional and individual commodity export earnings fluctuate far more than the total, revealing a very vulnerable aspect of the Canadian farm economy.

Imports

Canada's annual imports of agricultural products in the 1960's surpass \$1,000 million keeping pace with the growth of Gross National Product and of general merchandise imports. Since the Second World War the annual value of agricultural exports is only about one-third larger than imports. The major source of Canadian imports is the United States. From 40 to 45 per cent of our agricultural imports are products not produced in Canada, e.g. citrus and other tropical or semi-tropical fruits, sugar, rubber, tea, coffee, cocoa, rice and cotton. Another group, constituting 15 to 20 per cent of our agricultural imports, are winter produced fruits and vegetables largely from the United States and Mexico.

Trade between Canada and the U.S. in farm products is mutually advantageous, except for occasional dumping and disposal of end-of-U.S. season lots

of fresh fruits and vegetables imported into Canada at distressingly low prices. Canadian crops just coming to market or in the mid-season of marketing are annually exposed to the possibility of an avalanche of imported products.

POLICIES OF IMPORTING COUNTRIES

Market and political developments in customer countries are part of the scene in which Canadian development of agricultural policy takes place. We briefly state some major foreign policy positions of importance to Canada's agricultural export trade in the coming decade.

The European Economic Community

Agriculture is an important sector in the European Economic Community (France, West Germany, Italy, Netherlands, Belgium and Luxembourg). It accounts for about seven per cent of the value of production in the area and employs about 14 per cent of the Community labour force, an indication that the average level of farm income is about one-half that of non-farm income. Self-sufficiency in food production has risen from an average of about 85 per cent before the Second World War to the present 90 per cent. Agricultural output in 1968 was 31 per cent above 1957-59 levels, an increase mainly from technological improvement revealed in a sharp decline in the farm labour force. The level of self-sufficiency is maintained at high cost because the structure of the farm sector is weak. Almost one-half of all farm holdings are 12 acres or less in size. The fragmentation of holding inhibits the efficient use of modern techniques and wastes the time operators required to move from plot to plot. Marketing institutions and arrangements are also criticized as being inadequate for a modern efficient agricultural industry. One of the two important aspects of the C.A.P. (Common Agricultural Policy) is concerned with the improvement of production efficiency.

The C.A.P. calls for freeing trade in farm products among the six countries and a common regulatory system for imports from all restrictions. There is elaborate machinery for raising Community farm prices by a system of variable import levies and/or by fixed tariffs or a combination of these. The C.A.P. has succeeded in raising internal prices considerably (Table 3). High price supports have in turn led to embarrassing surpluses most of which have been sold abroad with the help of export subsidies. The breakdown of the International Grains Arrangement is in part ascribed to France selling subsidized exports at prices well below minimum levels in the Arrangement.

Central among the institutions in Community agricultural policy is the European Agricultural Guidance and Guarantee Fund (Fond Européen d'Orientation et Garantie Agricole). The revenues of this fund derive in part from the proceeds of variable levies on agricultural product imports from sources outside the E.E.C. and in part from Treasury contributions by the governments of the Six. The 1969-70 F.E.O.G.A. Guidance Section budget is

\$285 million compared with the Guarantee (price support) Section expenditures budgeted at \$2,750 million. In addition, Treasury costs for programs administered individually by the six governments totalled close to five billion dollars in 1967⁴.

The staggering costs involved in the import levies and the governmental appropriations to the F.E.O.G.A. do not represent the full cost of the C.A.P. Table 3 presents data on wholesale prices of selected farm products in the E.E.C. and compares them with world levels. The higher prices are of the order of 17 per cent for rice, 30 to 75 per cent for meat and eggs, 99 per cent for hard wheat and on up to 297 per cent for butter and 338 per cent for sugar. Canadian consumers should note that they are indeed well treated compared with their counterparts in the E.E.C. It has been estimated that "..... indirect costs in terms of higher prices to European (E.E.C.) consumers is valued at \$6.4 billion (annually)" and that "direct budget expenditures for farm price support (are valued) at \$7.7 billion for a total cost of U.S. \$14.1 billion annually."⁵ By 1968-69 the operation of the variable levy system and other production incentives led to the creation of burdensome stocks of butter, skim milk powder, wheat and sugar which led Dr. Mansholt, Vice-President of the European Communities Commission, to remark: "by 1970 we will not know what to do with our blessing".

TABLE 3
E.E.C. Prices and World Market Prices, 1967-68

Commodity	Community Price ¹	World Market Price	Excess of Community Price, %
(All prices in U.S. dollars per 100 lbs.)			
Soft wheat.....	4.88	2.63	86
Hard wheat.....	7.34	3.69	99
Hulled rice.....	8.16	6.97	17
Barley.....	4.12	2.58	60
Maize.....	4.10	2.56	60
White sugar.....	10.16	2.32	338
Beef and veal.....	30.91	17.65	75
Pigs.....	25.78	17.53	47
Poultry.....	32.88	25.00	32
Eggs.....	23.25	17.61	32
Butter.....	85.20	21.48	297
Oilseeds.....	9.18	4.60	100

¹ Data are wholesale prices and include direct support for production of durum wheat, olive oil and oilseeds.

SOURCE: Ibid, Annexe 12. Converted from U.S. Dollars per 100 kg.

Growing surpluses and the ineffectiveness of farm structural adjustments has led the E.E.C. to develop a ten year reform program. Under the new Mansholt Plan, emphasis would be shifted from support of product prices to

⁴ Commission des Communautés Européennes, Com. (68) 1000 Annexe 21.

⁵ U.S. Secretary of Agriculture Press Release, 27 June 1969.

farm structural adjustments. Incentives to move out of agriculture would be increased by grants, advanced retirement pensions, vocational training and the creation of 80,000 new jobs per year in agricultural areas. The Plan proposes the creation of much larger production units, some consisting of joint ownership and operation by a number of existing producers. An improved structure is expected to produce a still greater output. Therefore, to offset further increases at least partially, the Plan proposes to retire 12.5 million acres out of the 177 million currently in use for farming. The farm labour force would be reduced by half, from ten million to five million by 1980. Average annual cost of the plan for the 1970's will be \$2.5 billion. The plan also makes medium term proposals to deal with the pressing surpluses of butter, skim milk powder and sugar. Among these is a proposed subsidy payment of \$200 per cow slaughtered to be paid to farmers abandoning dairying.

While the Mansholt proposals make reference to the need for dismantling some of the mechanisms of intervention in the market and greater use of price policy to guide production more closely to demand, there is no indication of a reversal of the inward-looking policies of the C.A.P. The Community is expected to try to shift land resources from products now in surplus to temperate-climate products now imported such as feed grains and beef.

The results of the E.E.C. policies have been discouraging both in and outside the Community. The income gap between farm and non-farm families has widened. The Vedel Commission studying French agriculture to 1985 criticized market support as "ineffective and unjust" and stated that structural reforms have "merely accompanied developments which would have occurred in any case".⁶ Sorenson and Hathaway have assessed the situation as follows:

Those who believe that a move to a Common Agricultural Policy is likely to solve, or even appreciably alleviate, the low-income problem in E.E.C. agriculture are likely to be disappointed. First, the most prosperous farms are found in northern France and the Low Countries. These are the countries where the greatest increases in farm incomes will occur under the new policies . . .

It should be noted that no price policy will solve the income problem of most of these low-income farms. Only structural improvement can solve the problem and it will require a continued reduction in farm numbers, which is a long and difficult process. In this sense the E.E.C. policy is not unlike that of the United States; it gives great emphasis to income transfers from non-farm to farm people but the money that is transferred goes predominantly to those who are best off in agriculture, not to the poor.⁷

Monetary policy adjustments in the fall of 1969 struck a body blow to the C.A.P. The devaluation of the French franc forced the "isolation" of the

⁶ "Perspective à long terme de l'agriculture française 1968-1985", préparation du 6ième plan, Ministère de l'Agriculture; documentation française 2931, quais Voltaire, Paris 7ième.

⁷ Sorenson V. L. and Hathaway D. E.: *The Grain-Livestock Economy and Trade Patterns of the European Economic Community*, Institute of International Agriculture, Michigan State University, 1968, p. 117

French farm market from those of the other five countries, at least until the end of the 1969-70 crop year. The mechanism agreed upon is to adjust French farm prices to the extent of the devaluation. French farmers do not benefit by the increase they normally would have required for their produce due to devaluation. France is also required to impose levies on about 200 farm products exported to other member states and to third countries and grant subsidies on imports from the trading partners. To offset the upward revaluation of the German mark farmers in that country will receive about U.S. \$465 each year over the next four years in the form of increased subsidies.⁸

Of great concern to Canadians is the possible reduction in Canadian wheat exports brought about by increased E.E.C. import restrictions, export subsidies and changes in milling techniques. Task Force estimates show wheat imports by the E.E.C. from Canada at 42 million bushels in 1967-68 and at 40 million in 1980.⁹ Proposed taxes on vegetable oils, increased rapeseed production capacity of the Community and free entry of oilseeds from some 20 African countries further reduces prospects for Canadian oilseed exports to the E.E.C.

Imports of processed agricultural products increased by 86 per cent between 1960 and 1967, in spite of E.E.C. efforts toward greater self-sufficiency in agriculture. Canada's exports of those products to the Community, largely falling in the category "other agricultural exports" increased six fold between 1957-58 and 1967-68. Moreover, the E.E.C. processed foods market is expected to continue expanding at a rapid rate. The implications of the C.A.P. to world agricultural trade is disconcerting. The C.A.P. example could encourage other similar trends, disturb the climate of trade negotiations throughout the world and lead to a general erosion of markets for all agricultural exports. The C.A.P. lends strong support to the age old concept of self-sufficiency and leads major trading nations away from a multilateral approach to trade problems, a great disadvantage for Canada. Confronted with the prospect of further unilateral E.E.C. action against Canadian imports, Canada should employ tougher measures than in the past. She might well follow the precedents which have been used by both Britain and the United States against the E.E.C. in similar circumstances: threat of retaliation and where necessary, retaliation.

Britain

Britain is the world's largest single import market for agricultural products. Imports of temperate-climate agricultural products were valued at \$3,873.7 million in 1964 and \$4,099 million in 1968. Imports are being replaced as a matter of policy by domestic production. In an important policy statement

⁸ Payment of 1,700 million German marks to be distributed, 10% from F.E.O.G.A. and 90% from West Germany. "Le Monde" Selection Hebdomadaire No. 1099 13-19 novembre, 1969.

⁹ Chapter 5, Table 13.

late in 1968, the Minister of Agriculture, Fisheries and Food proposed an additional selective expansion of output to save a further \$414.3 million in foreign exchange by 1972-73. The major reason given for seeking increased domestic production was in the saving of foreign exchange but protection for British farmers does not appear inconsequential. Britain's agricultural production in 1966-67 to 1968-69 was 39 per cent greater than in 1954-55 to 1956-57. Table 4 gives details of the remarkable accomplishments of British agriculture in replacing imports by domestic production. We note also that while the world is struggling with serious grain surplus problems, Britain is going all out in expanding grain production. Food imports in 1960-62 accounted for 31.2 per cent of all British imports and in 1966 for only 26.5 per cent.

Production increases have been stimulated by substantial government assistance: expenditures by the Exchequer on price guarantees and production grants in 1968-69 and 1969-70 were estimated at \$727.6 million and \$823.4 million, compared with estimated net farm incomes of \$1,235.1 million and \$1,336.1 million respectively. Since the technique used to support prices is primarily that of deficiency payments, consumers have generally had the advantage of purchases at or near world prices. This is in contrast to the E.E.C. where price supports are implemented by offers-to-purchase and by high variable import levies. However, Britain does use tariffs for horticultural imports.

Gradually more order has been introduced to British markets through negotiating a series of agreements by which imports are allocated to specified exporting nations. In the case of the Cereals Agreements of 1964, signed bilaterally by Britain and about twenty exporting countries, export suppliers were to share in the growth of the home market. Domestic production increased so much that this provision was embarrassing to Britain and was quietly dropped in the 1967-68 negotiations.

TABLE 4
Production and Imports of Agricultural Products, United Kingdom, Selected Years

Commodity	1953-54		1961-62		1967-68 ¹	
	Home	Imports	Home	Imports	Home	Imports
(thousands of long tons)						
Wheat.....	2,664	3,853	2,573	4,609	3,836	4,023
Barley.....	2,521	1,255	4,974	531	9,242	180
Oats.....	2,821	82	1,822	42	1,361	20
Maize (corn).....	—	1,413	—	3,938	—	3,608
Total grains ²	8,917	6,632	9,556	9,675	14,568	8,091
Meat.....	1,421	1,000	2,141	1,106	2,376	960
Butter.....	29	288	58	407	41	467

SOURCE: Annual Review and Determination of Guarantees 1968 HMSO Cmnd. 3558.

¹ Forecast

² Also includes rye, mixed grain and sorghum.

Import quotas (by countries) were begun for apples at the end of the Second World War, for sugar in 1951, for butter in 1962 and bacon in 1964. Pork and cheese are also covered by voluntary market sharing arrangements.

If Britain and Denmark should join the E.E.C. they would have to move rapidly to adopt the C.A.P. Most estimates indicate that the cost of living in Britain would rise by three to four per cent. Some estimates run as high as seven per cent. Fruits and vegetables from Italy and France would take over the British import market. An enlarged E.E.C. would sharply reduce Canadian cereal and oilseed exports to Britain in the next decade and virtually eliminate cheese and apple exports. Membership in the E.E.C. would also entail substantial adjustments in British agriculture. Under present C.A.P. policies, resources would move toward cereals and away from hogs, poultry and horticultural crops.

Britain will be strongly impelled to press for liberalization of the C.A.P. when she negotiates for entry. In this she will have friends within the Community. Such possible development would help Canada to maintain her agricultural exports to Britain and the E.E.C.

The United States

In many ways the farm policy of the United States has been similar to that of the E.E.C. in spite of the fact that the U.S. has an agricultural surplus and the E.E.C. a deficit and that agriculture in the United States is only about one-half as large, relative to the American economy as is the case of the E.E.C. American offer-to-purchase support programs in the 1950's led to the accumulation of large stocks which in turn led to Public Law 480 disposal, primarily in less developed countries, to export subsidies and to acreage retirement and more severe acreage allotment programs. An estimated 63 million acres are kept out of production by acreage diversion payments of the U.S. government. It requires little imagination to picture what could happen to world markets and to prices if these acres were to be returned to commercial production. One specialist, Professor Earl Heady, states that with the continued advance of technology and foreseeable markets, it will be necessary to increase land retirement over the decade. He notes the rapid changes in American agriculture in the past 20 years and deduces:

(change) will have greater implications in extending the commercialization of the agricultural industry in making technology and management more sophisticated and responsive to change. Certainly farming will be a competitive industry, partly because the level of managerial skills will rise greatly . . . I predict, by 1980, that all leading commercial farms of any complexity will be using the services of electronic computers to devise annual plans. This system of planning will allow the manager to compare literally hundreds of production alternatives and to select the one most suitable.¹⁰

Professor Heady's quotation emphasizes the climate of international competition in which Canadian farmers will live. The Task Force has been accused

¹⁰ SOURCE: "U.S. Agriculture in 1980", *C.A.E.D. Report* 27, 1966, p. 18.

of excessive emphasis on the need for efficiency in Canadian agriculture. On the contrary, however, developments in the United States make it hard to be sufficiently emphatic on the consequences for the Canadian economy, of not 'tooling-up' its agricultural production. The United States is by a wide margin the largest agricultural export country in the world. American exports have exceeded \$6 billion per year for the past six years, compared with Canadian agricultural exports of about \$1.3 billion. Table 5 indicates that most American agricultural exports are directly competitive with Canadian i.e. in wheat, feed grains, oilseeds, tobacco and animal products. The similarity of our exports and the potential of U.S. capacity gives Canadians no choice.

From 1965 on there has been substantial change in the policy of the United States with respect to agricultural exports, particularly grains but also on other products. The Food and Agriculture Act of 1965, described as a "milestone in post-war agricultural legislation", provides for price support at or near world levels for the major crops with stabilization and adjustment programs to avoid the accumulation of surpluses. This is in contrast with earlier legislation which placed price supports at higher than world levels. The case of wheat is illustrative. In 1965 the loan rate (price support) level was dropped from \$1.82 to \$1.30 per bushel but millers were required to pay higher prices for all wheat consumed in the United States. Currently the wheat price support level is \$1.25 but a further \$1.31 per bushel is paid on wheat used domestically.¹¹

While the United States restricts some farm imports, she continues as a large importer. Food imports were valued at 4.7 billion dollars in 1968. Just over one-half of the commodities imported are also produced in the United States, the other half are tropical products. U.S. imports of "competitive or partly competitive" products have more than doubled in the past twenty years and grew by one billion dollars in the last decade. This would seem to provide an encouraging basis for Canada to participate in mutually advantageous negotiations between the two countries, particularly on livestock and livestock products and on fruits and vegetables. It is very easy to be too critical of U.S. policies on food imports. The above import figures do not describe an exceedingly protectionist country. Since 1934 and continuing through several stages, there have been very substantial reductions in U.S. tariffs on a large number of agricultural products. President Nixon has presented to Congress a proposed trade bill which, if accepted, would give limited tariff cutting power and go much further than the Trade Expansion Act of 1962 in opening the area on non-tariff trade negotiations. It is a matter of urgency that U.S. export subsidy programs be subject to review in G.A.T.T. or in another competent inter-governmental body.

¹¹ Those who do not adhere to the acreage allotment programs are not eligible for either the price support or the domestic milling payments. Of the \$1.31 per bushel, \$0.75 is paid by millers (and consumers) and \$0.56 by the Government.

TABLE 5
United States, Agricultural Exports, 1968

Commodity	Value (U.S. \$ million)
Wheat and wheat flour (Bus.).....	1,227
Corn and cornmeal (Bus.).....	753
Soybeans, including oil and cake.....	1,109
Tobacco (pounds).....	494
Fruits and vegetables and preparations.....	457
Animal and animal products.....	625
Other (cotton, etc.).....	1,648
Total.....	6,313

SOURCE: U.S. Foreign Agricultural Trade by Commodities, U.S.D.A., 1969

The foregoing analysis of American trade and agricultural policy suggests that there is scope for negotiation to mutual advantage for expansion of trade in agricultural products between the two countries. The low cost of transportation as well as comparable plant disease and animal health regulations also facilitate trade.

Japan

Japan has become one of Canada's most important markets for agricultural products. Table 2 shows 1967-68 annual exports from Canada to Japan of more than \$183 million, only slightly behind those of the United States and the E.E.C. Wheat and wheat flour exports to Japan have run at or near \$100 million per year for several years. She has become Canada's leading market for rapeseed and flaxseed. O.E.C.D. projections show a decline in Japanese wheat production in the future and rising import requirements from 2.8 million metric tons in 1961-63 to more than five million in 1975 and to 6.4 million in 1985. Only since the end of the Second World War has bread become an important item in the diet of the Japanese. Canada has an advantage in the market by selling quality wheat but the Japanese import market, under firm government control, is competitively divided between Canada, the U.S. and Australia, the three major suppliers.

Japan's per capita meat consumption is only 15 pounds per year but is rising rapidly. With her very limited land supply it will be necessary to import large quantities of feed grains. Thus from average imports of 3.2 million metric tons in 1961-63 O.E.C.D. projects imports of 11.7 million tons for 1975 and 17.7 million in 1985. Canada, already an important supplier, has an opportunity to greatly expand barley exports to Japan, provided our barley is competitively priced. At the same time all Japan's increased meat consumption will not be produced at home. There are limited prospects for Canadian beef and pork exporters to get a footing in the Japanese market, again on a price basis. Japan is presently removing some trade restrictions

and is expected to remove still more. This new trade climate would respond very well to aggressive sales efforts by Canada.

The Developing Countries

Less developed countries have provided an important market for American agricultural exports, almost all subsidized; and only a small market for Canadian exports, primarily wheat. The importance of these markets to Canada, however, lies largely in their ability to absorb surplus U.S. wheat, much of which would otherwise be forced into commercial markets in competition with Canadian wheat, than in the absolute size of Canadian exports to them. New American P. L. 480 regulations will reduce the amount of free food aid and increase the proportion granted on low interest loans.

A more important development however, is the introduction of high yielding wheats and rice and improved technologies which promise to make large deficit areas self-sufficient. One of the most important current trends in economic development assistance is the increased emphasis on speeding the introduction of modern technology, especially new varieties of plants and seeds, and the required accompanying inputs, into agriculture. Despite population increases the performance of the developing countries in producing their own food requirements in the 1970's is expected to be better than in the 1960's. Even so, there will be a continuing place for sizeable food aid shipments, from temperate-zone developed, to tropical developing countries over the next decade. The Task Force recommends that planning be undertaken by the Canadian Government on the question of supplying food aid. The government should be prepared to make food aid commitments for periods up to five years, even though this might involve planning and supporting production to meet such commitments. At the same time the Canadian government must do educational and promotional work in selected developing countries for the purpose of assuring outlets for Canadian products. And it should develop food aid products involving the use of skim milk powder, grains, and other Canadian farm products, whether or not they are in surplus.

DUMPING, DISTRESS AND INJURY

The issue for Canadian farmers in competing with low priced imports largely relates to imports entering at cyclically or seasonally depressed prices. Horticultural producers are particularly affected, since the harvest season in the United States is earlier than the Canadian season. However the stress is also felt by chicken, turkey broiler, egg and corn producers. Canada's most recent anti-dumping legislation of January 1969 is more effective than earlier anti-dumping legislation which became embroiled with G.A.T.T. regulations besides being slow in application. Canadian farmers complained of delays in getting decisions of their complaints and of the fact that the vast majority of their complaints could not be proven to the satisfaction of government. (The

Canadian government actually applied value for duty only eight times on charges of dumping between 1956 and 1968).

The Canadian government has understandably been very reluctant to impose value for duty since its application could very well result in a setback to delicate Canadian trade negotiations. Such a setback in negotiations could be far more costly to Canada than any possible gain from using arbitrary valuation for duty. The whole area of dumping, injury and threatened injury has led to serious conflicts among the signatories to G.A.T.T., forcing the issue to become an important part of the Kennedy Round negotiations. As a result, an Anti-Dumping Code was agreed and submitted to member government for ratification. Canada's special interest led it to take a leading role in these negotiations. The Anti-Dumping agreement codifies the determination of dumping and injury; investigation and administrative procedures; and anti-dumping duties and provisional measures. To bring Canadian laws and regulatory procedures into conformity with the Code, the Anti-Dumping Act was proclaimed effective in January 1969 and an Anti-Dumping Tribunal created.

Upon complaint or on the basis of information supplied by government officials, the Deputy Minister of National Revenue can make a preliminary determination of dumping or injury. Cause established, the Deputy refers the case to the Anti-Dumping Tribunal, which must report within 90 days. A provisional duty may be levied or a deposit required from the importer until the findings of the Tribunal are available. Only after the findings have established damage can dumping duties be levied. The dumping duty applied is the difference between the normal value in the export country and the actual export price.

In dealing with products entering Canada at cyclically or seasonally depressed prices but not being dumped, action is taken by Order in Council under the amended Tariff Act. Products entering Canada at a low or distress price can be made subject to a surtax sufficient to remedy the situation. The use of this action is limited to 180 days unless approved by Parliament and is subject to consultation with the G.A.T.T. members which might be affected. Most of the problems in agricultural trade are of a seasonal or cyclical nature and are dealt with outside the context of the Tribunal. Changes in legislation and administrative procedures implied in the Anti-Dumping Act and in the consequential amendments of Canada's tariff legislation provide more effective protection to Canadian farmers without raising the level of protection. Questions of dumping, distress and injury would still apply whether a complicated tariff structure, as now prevails for fruits and vegetables or in a free trade situation.

In spite of the improvement coming from the new legislation, the question of the speed essential for relief against dumping and seasonally low import prices is still not fully available. The question of the U.S. price norms on which the surtax should be applied remains. The use of U.S.D.A. current price quotations in the area of origin of imports has been suggested. Another

method has been to refer to historical price series over a period prior to filing the complaint. An automatic triggering device to determine when and how much action is necessary should be established. It should be possible to negotiate this issue. The U.S. government, signatory to the Code, is surely just as interested as Canada in developing the necessary administrative machinery to provide for the application of meaningful measures of relief against dumping or injury.

Several conclusions may be drawn from the foregoing review of the form and direction of Canada's trade in farm products and the domestic and trade policies of countries which import Canadian farm products or which compete with Canadian exports in third country markets.

1. Canadian farm exports are of such a size relative to Canadian production that it is futile to consider a policy of self-sufficiency and withdrawal from world markets.

2. Continued participation in international trade demands competitive prices and therefore lower cost production.

3. The United States, Britain and E.E.C. have huge programs which support farm incomes and in the case of the latter to encourage output. The United States and the E.E.C. support their agriculture by export subsidies. Similar programs would be far more costly in Canada because agricultural exports are a far greater proportion of national income than in the other countries.

4. A dilemma facing Canada is whether to follow (partially, and as much as we can afford) the subsidy and protection policies of others or to let the farm sector take the brunt? The dilemma is more acute if the subsidy and protection policies of other countries are judged to be ill-conceived and not even in their own best interests.

COMMERCIAL POLICY CONSTRAINTS

Compilation of information on tariffs, licensing arrangements, exchange controls, sanitary regulations and other documentation activities of government are very useful to exporters and prospective exporters. Documentation activities, however, do not create trade and governments now take a more active role in trade promotion by establishing more contacts with their exporters, with importers of Canadian products and by bringing possible exporters and importers together. Specialists in commodity promotion e.g. in potatoes and pork products should be given particular assignments to expand sales of agricultural products. Trade fairs assisted by governments are a valuable means of trade promotion. Japan uses a floating trade fair which has visited more than 100 large trading centres. The United States successfully developed a wheat market by using mobile bakeries to encourage the Japanese to become bread eaters.

Since the Second World War, export insurance and export credit have been widely used. Canada employs the Export Development Corporation (E.D.C.)

in this work. An international convention governing some of these activities has been established to prevent abuses arising when extreme competition exists in the provision of these services. The insurance policy of the E.D.C. predecessor, the Export Credit Insurance Corporation, was "excessively conservative" and interest rates charged by the corporation were higher than those charged in competing countries. The Export Development Corporation, which has assumed all functions of E.C.I.C. will expand operations and facilitate borrowing at lower interest rates. Canada must be fully competitive to support farm exports, even in the face of the danger of substituting some non-commercial sales for commercial.

During the 1970's negotiations respecting agricultural trade are expected to become negotiations respecting domestic agricultural policies of both importing and exporting countries. This will likely include the question of using export subsidies. However, there is understandable reluctance, and in most situations, an outright refusal to place domestic farm policies on the negotiating table. The failure of the Kennedy Round negotiations respecting agriculture is a case in point. However, attempts to include national agricultural policies in international negotiations cannot be abandoned. Canada must continue initiatives to encourage negotiation of agricultural trade multilaterally. Failing success, Canada must undertake similar initiatives on the basis of smaller groups of countries and if necessary, on a bilateral basis. She must in turn be prepared to discriminate in both agricultural and non-agricultural trade against countries which impose further restrictions against Canadian agricultural exports. At the same time governments must take a fresh look at the use of export subsidies on food. She faces the challenge of export subsidized products of other exporters in markets where Canada has an already established position. Further an indication of Canada's readiness to compete in export subsidization would help to moderate the use of this practice by competitors. The use of export subsidies in the contrast of market development is increasingly acceptable. Canada should consider its use, for instance, in tobacco exports.

The Task Force contends trade in agricultural products can be expanded by implicitly bargaining away some features of domestic agricultural protection. Fruitful efforts will result only when all parties approach the bargaining table with a shelf of concessions it is prepared to make in the trade-off process. The main point is that in tackling this bargaining process Canadian negotiators have the broadest possible leverage to make trade gains for our agricultural products. When very substantial gains to agricultural industries, consumers and national treasuries resulting from a more rational pattern of resource use are widely known, governments may be pushed toward rationalization of agricultural programs. Canada should work toward this end.

The foregoing assessment of the important factors bearing on Canada's prospective international trade opportunities in agricultural products can best

be placed in perspective by a quote of Mr. J. H. Richter of the Staff of the International Federation of Agricultural Producers. He states,

One might even say, paradoxically, that in the relatively near future, the growth of commercial agricultural trade is likely to be hampered either by the growth of protection or by the growth of productivity. Clearly, the world's choice must be for the latter. But in any case, it will be the better part of wisdom for all agricultural exporting countries of the temperate zone to face this prospect realistically in their negotiations as well as in their international and domestic policies.¹²

There are positive and constructive initiatives which Canada can and must take in the international trade arena—consistent with the above statement. Most important is in providing leadership in re-structuring G.A.T.T. so that it can constructively discuss non-tariff barriers, price supports, and the relation between monetary and trade policies.

RECOMMENDATIONS

1. The Canadian Government must take further initiatives (as opposed to merely reacting to others' proposals) in attempting to reduce tariffs on agricultural products. What is essential here is a re-appraisal of the old notion, that every tariff cut represents a loss and is to be bargained against similar cuts (assumed to be losses) by others. Canada must assert strong leadership in the direction of securing a resumption of trade discussions on a multilateral basis and insist on including agriculture. Failing success, Canada must be willing to join trade arrangements with small groups of nations, including where necessary, bilateral trade treaties (e.g. with the United States). Further, Canada must in international negotiations show a readiness to discriminate in agricultural and non-agricultural commodities against countries or blocs which impose restrictions on Canadian agricultural exports.

2. The primary specific trade goal of Canada should be to negotiate a free trade Continental Market with the United States for livestock and livestock products, feed grains, oilseeds, potatoes and some fruits and vegetables.

3. Government must be willing to subject other sectors of the Canadian economy to increased foreign competition. For example the so-called "voluntary quotas" on Japanese textiles and other manufactures adversely affect the willingness and ability of the Japanese to purchase Canadian grains and meat. If other sectors of the Canadian economy have not made the adjustments necessary to become competitive (as most of agriculture has), then it is time they were helped to do so by the pressure of competition.

4. Canadian agricultural development and farm incomes are adversely affected by tariffs on farm inputs and on inputs used in the agricultural processing industries. These duties should be removed in the interest of

¹² "World Agriculture", Washington, I.F.A.P., Vol. 18 No. 3, 1969 p. 18.

making Canadian farm products more competitive, particularly in an international context. Appendix 1 to this chapter lists the more important input items on which such action should be taken.

5. Canada must experiment with pricing strategies aimed at meeting dumping of products by its competitors, e.g. 1968 and 1969 barley exports by France to Japan. This might be the best possible means to restore international competition to a commercial basis.

6. Increased trade promotion and trade development activities are required. Support and encouragement must be given for joint endeavours by farm groups, by the federal and provincial governments, by trade associations and private business.

7. Export credit and export insurance. The Export Development Corporation must be fully competitive, in its time horizons and interest rates, with similar bodies in other countries. Credit terms are often as crucial to sales as are prices.

8. Canadian grades and grading must be improved on many agricultural commodities. Failure to move to protein grading has resulted in loss of wheat sales.

9. Emphasis must be placed on continuity of supply for export markets. Because export markets are residual markets for many products and often yield a lower net price than the home market, there has been a tendency to turn to them only in emergencies, a poor way to create a market for exports. British Columbia apples, controlled by a provincial marketing board present a sharp contrast to tobacco, winter wheat and white beans also marketed by provincial marketing boards.

10. Plan food aid to less developed countries. While the Task Force welcomes the break-through in the application of newly-developed grains in the developing countries, substantial food aid requirements will continue for many years. Canada's contribution to food aid needs should be carefully planned and involve commitments of specific quantities of specific foods for periods up to five years.

11. Market research must be greatly expanded. The research should reveal (1) size of markets; (2) quality of products demanded; (3) how markets are changing; and (4) market strategies for Canadian firms. Through research, government must attempt to anticipate international trade developments before they occur, pass along warnings and advise and give assistance to farmers so that they might take advantage of or avoid the impacts of such developments. The Task Force has observed that there is insufficient "forward looking" research and that there is a gap between those undertaking the research and the farmers who make production decisions.

12. Domestic farm policy must be made consistent with changing international developments.

APPENDIX 1

Input Items on Which Existing Canadian Import Duties Should Be Removed

Tariff Item No.	Description	Most Favoured Nation Per Cent
6905-1	Cattle food.....	10
6921-1	Feeds n.o.p.....	5
6922-1	Bran, shorts.....	5
6923-1	Dried beet pulp.....	5
6924-1	Brewer's and distiller's grain.....	5
6925-1	Grain hulls.....	5
6926-1	Flaxseed screening.....	5
6927-1	Screening n.o.p.....	5
6928	By-products from milling of grain.....	5
40112-1	Wire fencing, mesh, netting, screening.....	12½
42700-1	Machines, n.o.p. fans, conveyors, feed mixers etc.....	17½
44603-1	Manufactures of iron and steel, n.o.p. poultry, waterers and feeders, wire gates, haying equipment, milk parlor stalls, etc.....	17½
44706-1	Water pumps, hand or power.....	17½
44725-1	Well points, well screens, well strainers.....	7½
17900-1	Price tags, etc.....	20
19300-1	Paper sacks or bags.....	15
19900-3	Paper milk bottle caps.....	17½
19910-1	Containers from fibreboard.....	17½
19911-1	Fibreboard shipping containers.....	15
19950-1	Wire reinforced paper tape for packaging of fruit, vegetables or other farm products.....	10
40946-1	Pasteurizers for dairying purposes.....	15
40952-1	Milk evaporators.....	7½
40960-1	Materials and parts for silo construction.....	10
41800-1	Machinery to manufacture poultry feed and fertilizers from fish.....	10
42732-1	Machinery for dairying purposes, power churns, cookers, ice cream mixers, etc.....	15
42733-1	Machinery for dairying purposes, power filters and cappers, power washers, ice-breaking machinery, etc.....	7½
43105-1	Shovels and spades.....	15
43110-1	Hoes, forks.....	15
43205-1	Dairy, hollow ware.....	17½
43215-1	Tinplate containers for canning foods.....	17½
54325-1	Bags of jute, hemp, linen or sisal.....	12½
66330	Iodized mineral salts for feed.....	5
66335	Fish meal.....	10
66340	Oyster shell for poultry.....	5

SOURCE: Trade of Canada, Imports by Commodities, D.B.S December 1968.

chapter five

WHEAT, FEED GRAINS AND OILSEEDS

INTRODUCTION

The grain surplus problem has reached crisis proportions in Western Canada during 1969-70. The massive carryover of grain, uncertain and unstable prices, acute shortage of cash among farmers and a deteriorating outlook make it clear that something must be done quickly to alleviate these problems if the prairie grain economy is not to suffer irreparable damage. In seeking for a solution to the immediate crisis, however, the longer-run and more fundamental needs of the prairie grain industry must not be neglected. Emergency-oriented programs must not become the basis for longer-term policies for the grain economy.

Since the beginning of settlement in Western Canada, the grain economy has been subject to unpredictable fluctuations in crop yields, market conditions and farm income. There have been periods such as the 1930's when low prices and crop failure led to widespread mortgage foreclosure, farm abandonment and general economic distress throughout the prairie economy. During the mid-sixties, by contrast, high yields coincided with buoyant export markets to provide prairie farmers with one of the more favorable periods in the history of their industry. Longer-term policies for the grain industry must recognize the extreme fluctuations which can occur in conditions relating to the welfare of prairie grain producers.

In general, the predominance of wheat in the Prairie Provinces has made farmers extremely vulnerable to the vagaries of climate and changing market conditions. Adverse or healthy conditions in the wheat economy spread

quickly to other sectors of the agricultural industry. After nearly a half-century of experience with the problems of the prairie grain economy and a search during most of that time for adequate marketing policies and programs, a final answer continues to elude the farmer and the policy maker.

There is no consensus as to what course of action should be followed. The proposals for the solution of the problems surrounding the grain industry are many and conflicting. Some advocate the abolition of the Canadian Wheat Board and a return to the open-market method of selling grains. Others advocate an even stronger position for the Wheat Board in the marketing of grains. The recommendations and exhortations are many: rebuild the International Grains Arrangement; compete more aggressively in world markets through more competitive pricing arrangements; control the production of wheat; develop a more efficient grain industry through the introduction of higher yielding grains; encourage greater diversification in the Prairie Provinces through increased livestock production; do not shift the problems of the grain industry to the livestock producer; continue to sell higher quality wheat; shift to markets requiring lower quality wheat; wait long enough and crop failures in other parts of the world will solve the surplus grain problem; set up programs to feed the hungry and undernourished peoples of the world.

Each of these proposals is plausible but it is obvious that a policy for the grain industry cannot be built on a set of such conflicting proposals.

The Task Force is convinced that fundamental and far-reaching changes will be required if a satisfactory policy is to be developed for the grain industry and if the current grain surplus problem is to be solved in the foreseeable future. Short-run palliatives will not suffice. Historical differences of opinion must be buried and institutional rigidities set aside in the search for a policy which will provide an effective solution for the problems which plague the grain industry in Western Canada. The over-riding reality is the mounting surplus of grain and the horrendous consequences for the prairie economy, indeed for all of Canada, if a remedy is not found soon.

The discussions and recommendations which follow call for major changes and adjustments in existing policies and institutions. The Task Force recognizes that long-held traditions are being challenged and that many of the recommended changes will not be received enthusiastically by all persons associated with the grain industry. The Task Force contends, however, that present policies and programs are not working and no amount of tinkering with the present system will yield satisfactory answers to the problems facing the grain industry. It seems clear that radical new approaches must be considered. Major surgery must be performed if the patient is to be saved.

THE MARKETING AND PRICING OF WHEAT

The marketing of wheat cannot be understood without a full recognition of the dominant role played by the Canadian Wheat Board in the overall grain marketing system. The Board, a crown corporation which reported (until

recently) to the Federal Minister of Trade and Commerce,¹ does not own or operate grain handling facilities. Under the Canadian Wheat Board Act of 1935, however, the Board has complete control over the way wheat is marketed and the price at which it is sold. Before a producer can deliver his wheat to any licensed elevator he must obtain a delivery permit book from the Wheat Board. When and how much wheat may be delivered by the individual producer is determined by a system of delivery quotas established by the board. The country elevator system to which the farmer delivers his wheat acts as an agent for the Board; the facilities owned by private and co-operative elevator companies are utilized for the purchase, storage and shipment of grain delivered by producers, and a handling agreement is negotiated between these companies and the Board, setting out the conditions under which the operations are conducted for Board account. The country elevator delivers the wheat received from the farmer to terminal points or other destinations under instructions issued by the Board. These instructions are provided in the form of shipping orders. The shipping orders, in turn, dictate the allocation and use of railway boxcars. Members of the private trade who are shippers and exporters act as agents of the Board under a negotiated agreement. In this capacity they are responsible for the forwarding of wheat to eastern elevators and export terminals where it is held for Board account pending sale to domestic or export markets. The wheat is sold by the Board for export either through its agents or on the basis of a direct agreement between the Board and a foreign government or a government agency as purchaser of the grain.

Shipping and exporting firms perform many of the selling, exporting and handling details involved in marketing Canadian wheat. In 1967-68, there were 26 firms acting as shipping and exporting agents located in Winnipeg and 17 firms located in Vancouver to handle the West Coast trade.

Shippers are defined as those firms involved in the movement of grain within Canada. Exporters, who may also act as shippers, are primarily concerned with international or export markets and these firms buy and sell grain among countries and make the necessary transportation and financial arrangements.

Exporting firms are, in the main, large international corporations that have an international network of offices and contacts.² These firms deal in many commodities and are located or represented in most exporting and importing countries. These firms sell Canadian, American, Australian and Argentine wheat into importing countries. Canadian firms sell only a small proportion of exports. The risk and profitability associated with international trading are the main reasons for the decline of Canadian exporting firms and the rise of

¹ In October 1969, the Federal Government made a Minister-Without-Portfolio responsible for the Canadian Wheat Board. He will be associated with the Federal Department of Industry Trade and Commerce in this new capacity.

² The four major international grain exporting companies in Canada are: Cargill Incorporated (based in Minneapolis), Bunge and Borne Incorporated (based in Argentina), Continental Grain Company (headquarters in New York) and Dreyfus (several companies make up this group—headquarters in Switzerland).

these large international firms. These latter firms have developed a highly advanced information and communication system and their familiarity and continued use of such international factors as freight and exchange rates and the changing governmental regulations of different countries give these firms an advantage. Their broader base of operations, involving multi-national and multi-commodity selling, is an additional advantage over single country operations.

The question has been raised with the Task Force as to whether firms whose head offices are not located in Canada, and who trade in grain and many other products from many countries, would be under the same pressure to sell Canadian wheat as would a Canadian firm whose success would depend exclusively on the sale of Canadian grain. The Task Force recognizes the significance of this question but has no information on it which would allow it to reach a conclusion.

Many other operations and responsibilities of the Board could be described including the administration of such policies as the Prairie Grain Advance Payments Act but the above functions will indicate the pervasive influence of the Canadian Wheat Board in the marketing of wheat.

The initial price for wheat is set at the beginning of each crop year by the Federal Government. The initial price is actually a guaranteed floor price for the wheat producer for the crop year. With the exception of 1969, however, the initial price has been set well below the final price realized by the Wheat Board (Table 1). The price of wheat from one year to the next has varied very little and, until recently, there has been relatively little change in the monthly price of wheat.³ The international Wheat Agreements have no doubt contributed to this relatively high degree of price stability, particularly during those years when the market price of wheat has been close to the minimum price set under the International Agreements. During 1969, however, there has been considerable instability in the world price of wheat particularly during the period when the principal wheat exporters of the world ignored the minimum price set under the International Grains Arrangement and engaged in a wheat "price war".

There have been periods during the past two decades when it appears that the Canadian Wheat Board, through its pricing policy, held an umbrella over world wheat prices. This was particularly evident during the 1967-68 crop year when the United States declared a "free year" with respect to export pricing while the Wheat Board declined to lower prices to levels which would jeopardize the coming into force of the International Grains Arrangement.⁴

By following this policy, the Board did contribute to the objective of price stabilization but it also meant that the Board was unable to be as fully competitive as it might have been, with the result that loss of sales occurred.

³ See *Annual Report*, Canadian Wheat Board, 1967-68. For example, for No. 1 Northern Wheat in store Ft. William the average monthly price for the crop year 1967-68 varied from a high of \$2.04 in August 1967 to a low of \$1.90½ in November 1967.

⁴ See the 1967-68 *Annual Report*, Canadian Wheat Board, page 12.

During 1969 however, the Wheat Board followed a relatively aggressive course of action in the pricing of Canadian wheat. In March 1969, the Board cut its prices of wheat below the I.G.A. minima in response to the actions of other countries which had been reducing wheat prices almost from the time that the I.G.A. came into effect on July 1, 1968. A series of retaliatory cuts took place among all the major wheat exporting nations of the world and in July 1969, the I.G.A. price minima were suspended by the five major wheat exporting countries.

TABLE 1
Initial, Interim and Final Payments for No. 1 Northern Wheat
Basis in Store Ft. William/Port Arthur. 1960-61 to 1969-70

Pool Account	Initial Payment	Adjustment Payment	Interim Payment	Final Payment	Total Realized Price
(dollars per bushel)					
1960-61.....	1.40		.10	.295	1.795
1961-62.....	1.40	.10		.410	1.910
1962-63.....	1.50			.370	1.874
1963-64.....	1.50			.474	1.974
1964-65.....	1.50			.387	1.887
1965-66.....	1.50			.497	1.997
1966-67.....	1.50			.487	1.987
1967-68.....	1.70			.114	1.814
1968-69.....	1.70			n.a.	n.a.
1969-70.....	1.50			n.a.	n.a.

SOURCE: Canadian Wheat Board *Annual Reports*.

The downward pressure on wheat prices led the Federal Government to reduce the initial price to \$1.50 per bushel for the crop year 1969-70, 20 cents less than the initial wheat price in the previous crop year. At the same time, the Government announced that the sale of wheat in Canada for human consumption would be based on a minimum price of \$1.95½ per bushel for No. 1 Northern in store Ft. William.

The more aggressive course of action followed by the Wheat Board in the pricing of wheat in 1969 is in marked contrast to the policy followed in earlier years. While the Canadian Wheat Board contributed greatly to the stabilization of world wheat prices, the mounting surplus of grain in Canada during the past few years has raised serious questions about the efficacy of the approach followed by the Board. While the experience in 1969 indicates that "cut-throat" competition is not a desirable solution to the problem, it does suggest that it is not in Canada's best interest to emphasize price stabilization if wheat sales are lost as a result.

The wheat price war which erupted in 1969 also casts doubts on the present terms of the International Grains Arrangement which came into effect on July 1, 1968. The I.G.A. appears to have several advantages over the

earlier International Wheat Agreement insofar as Canada is concerned. Under the previous International Wheat Agreement, the price range was expressed in terms of a minimum and maximum price for one specific type of wheat (Manitoba No. 1 Northern) in one position (in store, Fort William/Port Arthur) with a formula for establishing equivalent minimum and maximum prices for other Canadian or foreign ports of origin. Under the I.G.A., instead of No. 1 Manitoba Northern at Ft. William/Port Arthur providing the bench mark for price standards, as had been the case previously, American No. 2 Hard Winter Wheat (ordinary protein) at the Gulf of Mexico ports became the new pricing base, and price ranges were established for 14 grades of wheat (Table 2).

TABLE 2
The Schedule of Minimum and Maximum Prices F.O.B. Gulf Ports,
International Grains Arrangement, 1968

Country	Grade of Wheat	Minimum Price	Maximum Price
(\$ U.S. per bus.)			
Canada.....	Manitoba No. 1.....	1.95½	2.35½
	Manitoba No. 3.....	1.90	2.30
United States.....	Dark Northern Spring No. 1, 14%.....	1.83	2.23
	Hard Red Winter No. 2 (ordinary).....	1.73	2.13
	Western White No. 1.....	1.68	2.08
	Soft Red Winter No. 1.....	1.60	2.00
Argentina.....	Plate.....	1.73	2.13
Australia.....	F.A.Q.....	1.68	2.08
E.E.C.....	Standard.....	1.50	1.90
Sweden.....		1.50	1.90
Greece.....		1.50	1.90
Spain.....	Fine Wheat.....	1.60	2.00
	Common Wheat.....	1.50	1.90
Mexico ¹		1.55	1.95

¹ The minimum and maximum price for Mexican wheat f.o.b. Mexican Pacific Ports, or border points.

SOURCE: *Annual Report 1967-68*, Canadian Wheat Board.

The main advantage of the new pricing formula to Canada was described by Runciman:⁵

A price related to an American wheat somewhere down the quality scale probably offers more protection to Canadian producers than a pegged-price for No. 1 Northern under which all other wheats in the world can fluctuate freely. Under the previous Agreement, the only price specifically fixed was that of No. 1 Northern in store at the Lakehead, all other maximums and minimums were calculated from this base but, in effect, Canada was the only country tied by the Agreement because she was the only producer of this grade. The other countries were not bound by fixed minimums and could

⁵ Runciman, A. M. *Canada's Stake in The International Grains Arrangement*, Proceedings of the Manitoba Institute of Agrologists, Winnipeg, October-November, 1968.

lower prices by widening grade spreads and quality differentials and thus undersell Canada's quality wheats by a wide margin. In fact, this is what happened when prices dropped sharply in January, 1965, and the United States cut prices below what was regarded as the minimum under the International Wheat Agreement.

There can be little doubt about the desirability of some mechanism such as the International Grains Arrangement to prevent chaotic conditions from developing in the international market for wheat. At the same time, there appear to be weaknesses and limitations in the International Grains Arrangement from Canada's point of view.⁶ These weaknesses and limitations may be briefly summarized as follows: the minimum price levels under the I.G.A. are at such a high level as to continue to stimulate production in countries which normally import most of their requirements; there is uncertainty concerning minimum prices for wheat other than the specific grades mentioned in the I.G.A. price schedule; the price level for Canadian wheat is not realistic in relation to present world demand for various kinds of high quality wheat; Canada lacks the flexibility of other countries particularly the U.S.A., since it has not as many types and qualities of wheats; internal freight rates in the U.S. with payments in the way of subsidies for extra freights permit the U.S. to be more competitive in an aggressive selling program, i.e. the U.S. traders can absorb the freight savings and offer wheat at a lower price.

The difficulties which emerged during 1969 are evidence of the need for changes in the I.G.A.

THE MARKETING AND PRICING OF CANADIAN FEED GRAINS

With one major exception, Canadian feed grains were sold through the open market prior to August 1, 1949. The exception involved the period during the last war when the Federal Government took steps to intervene in the marketing of coarse grains. In 1948 however, the Government of Canada introduced a bill which included provisions for the compulsory marketing of oats and barley through the Canadian Wheat Board. The Act became operative on August 1, 1949, after the three Prairie Provinces passed concurrent legislation placing the marketing of coarse grains under the Wheat Board.

Since that time it has been the policy of the Canadian Wheat Board to sell oats and barley either on the Winnipeg futures market or on a cash basis at Fort William, Vancouver, or country points. The Wheat Board sells coarse grains to the private trade. Private dealers can make use of the facilities of the futures market to hedge their stocks while making sales. The market is not an open market in the traditional sense of the term since the C.W.B. has complete control of the supplies of all prairie grain coarse

⁶ For a detailed discussion of these limitations see Runciman, A. M., *ibid.*

grains sold through commercial channels.⁷ The Wheat Board has been given the authority to license all imports of wheat, oats, and barley. As the sole supplier of prairie feed grains to the market the C.W.B. has a dominant influence on the prices which are set from day to day. The futures market for coarse grains can only be meaningful if the private trade has full confidence that there will be a consistent relationship between the cash and futures markets.

The grain producer has several ways in which he can dispose of his oats and barley. During the crop years 1967-68, for example, only 11.8 per cent of the total farm supplies of oats and 29.8 per cent of the farm supply of barley in the Prairie Provinces were delivered to the Wheat Board. The remainder is disposed of in various ways. A large proportion of the coarse grains is fed directly on the farm. Since 1960 individual grain producers have been permitted to deliver non-quota grain to feed mills which have been designated as non-quota mills by the Canadian Wheat Board. A considerable quantity of feed grains is sold by one farmer to another and to feedlot operators within the same province on a non-quota basis. During years of surplus, the non-quota prices for feed grains have been well below the prices set by the Canadian Wheat Board.

A matter of considerable controversy relates to the need for greater flexibility and greater competitiveness in the pricing of coarse grains by the Canadian Wheat Board. Until recently, when the Board adopted a more competitive position with respect to the pricing of export feed grains, the evidence suggests that Canada has lost considerable sales for barley both in the domestic and export markets.

In spite of a relatively large carryover of oats and barley in Canada each year, the need for cash by prairie farmers, low non-quota prices for feed grains in the Prairie Provinces and an annual Federal Government expenditure on feed freight assistance of 15 to 20 million dollars, considerable quantities of corn have been imported into Eastern Canada each year. This situation is difficult to explain and hard to defend, particularly since the grain surplus problem on the prairies has been growing for some time.

There appear to be several reasons for this failure to supply the feed grain needs of Eastern Canada. One of the major difficulties appears to have been associated with the adverse spread between the cash and futures price for barley. In order to encourage an orderly distribution of sales over a given season, the future prices should reflect a carrying charge. Normally, the cash price for a storable commodity such as barley should rise throughout the season at a rate equivalent to the cumulative storage costs; it should equate eventually with the futures prices. This has not been the case for barley and oats in the Winnipeg futures market during recent years. Indeed, the May futures price for barley has frequently been below the October price thus discouraging the purchase of feed grains for storage and sale

⁷ An open market has generally been defined as one where there are a large number of both buyers and sellers and a minimum of restrictions in the market.

at a later period in Eastern Canada. At the same time that this situation created an “artificial” shortage of prairie feed grains in Eastern Canada, American corn was imported, stored and later sold to Eastern livestock feeders.

The Wheat Board as the sole seller of feed grains on the Winnipeg futures market and through its use of delivery quotas has a dominant influence on the level at which prices are set for coarse grains.

While the primary objective of the Wheat Board is to obtain the highest possible prices for Prairie grain producers, high prices are of questionable value if they are not competitive with alternative sources of feed grains, and if potential sales are lost.

The absolute decline in the exports of Canadian feed grains during recent years at a time when the world market for feed grains has been growing is cause for serious concern. While import quotas, export subsidies and other similar practices have made it increasingly difficult for Canada to expand its sales of feed grains, it appears to the Task Force that a less-than-adequate job was done in competing for the feed grain markets of the world. Very wisely the Wheat Board decided during the latter part of 1969 to price more competitively, and the favourable results in terms of expanded exports which have been achieved to date are indications that Canada can and must keep its prices for feed grains in line with world demand and supply conditions.

A feed grain marketing policy which leads to burdensome surpluses, extremely low non-quota prices in the Prairies, the importation of American corn into Eastern Canada and loss of export sales can hardly be regarded as desirable from the western grain producer's point of view. It is clear that major changes are required in Canada's feed grain marketing policy if the current difficulties are to be resolved. More will be said about these necessary changes in later sections of this chapter.

THE MARKETING AND PRICING OF PRAIRIE-GROWN RYE AND OILSEEDS

Flaxseed, rapeseed and rye are sold through the open market. Country elevators purchase these crops at the prevailing market price and for their own account. The Canadian Wheat Board intervenes to the extent of setting delivery quotas and issuing shipping orders for these crops. Cash purchases from the farmer are hedged by the company selling futures contracts.

Unlike the situation for oats and barley where the futures market is heavily influenced by the Wheat Board as the sole supplier of coarse grains, the futures market for rye, flaxseed and rapeseed reflect the supply and demand forces of the open market. In contrast to the relatively “fixed” prices from day to day and from month to month for coarse grains, the prices for rye, flaxseed and rapeseed tend to be much more flexible and responsive to

changing market conditions. And as one would expect where the prices of these commodities reflect the forces of the free market, the futures prices tend to reflect the cumulative carrying charges, except when these crops are prevented from moving freely into position; the cash price converges towards the futures price throughout the marketing year. This is in contrast to the situation which has frequently prevailed for the feed grain futures prices as we have noted above.

THE TEMPORARY WHEAT RESERVES ACT

By July 31, 1970, it is estimated that the wheat carryover in Canada will amount to approximately one billion bushels, equal to 250 per cent of the wheat stocks carried at the end of the 1965-66 crop-year.

These excessive stocks of wheat in Canada result from a large number of policies, the most important of which appears to be the Temporary Wheat Reserves Act. The Act was passed in 1954 to relieve wheat producers temporarily of part of the costs of storage of abnormally large accumulated carryover of wheat. Under the Act, the Government of Canada pays to the Canadian Wheat Board, for the benefit of wheat producers, an amount equal to the carrying charge rate paid by the Board at the end of the immediately preceding crop year multiplied by the number of bushels of wheat in storage on August 1, in excess of 178 million bushels. The amount paid out under the Act may be seen in Table 3.

This Act appears to have had many implications for wheat production and marketing in Western Canada. Because of the Act, the effects of production in excess of market requirements have not been fully felt by farmers. This has been an important factor interfering with market forces, and perpetuating a supply of wheat in excess of demand. Furthermore, the Act may have encouraged the Wheat Board to accept larger amounts of wheat in preference to oats, barley or oilseeds since the storage subsidy applies only to wheat.

Commercial stocks of wheat have never been less than 287 million bushels at crop year-end since 1952-53, and have averaged 370 million bushels from then until 1966-67. Farm stocks have in addition averaged 115 million bushels over the same period at crop year-end. If a safe crop year-end level of wheat stocks on average, necessary to meet export commitments and domestic requirements is set at say 200 million bushels⁸, then some 285 million bushels of excess wheat stocks (including those on farms) have been carried on average since 1952-53, and this level is increasing. The total cash carrying charges have been 12.6 cents per bushel on all wheat delivered to the Board since 1954-55 of which the Government's share

⁸ See later discussion relating to the need for a "normal granary" or a clearly defined storage or wheat carryover policy. There is a need for a buffer stock but there is a maximum carryover limit beyond which undesirable surpluses begin to appear.

through the Temporary Wheat Reserves Act has averaged 8.5 cents per bushel on all wheat delivered to the Wheat Board. The average annual cost to the Government has been \$35 million. It is estimated that the funds to be paid under this Act for the 1969-70 crop year will be in excess of \$63 million.⁹

The Temporary Wheat Reserves Act subsidizes producers' incomes after they have produced in excess of market demands, and encourages them to continue producing in excess of market demands. It has become self-perpetuating as one of the measures which creates excessive production of wheat and mis-allocation of resources in agriculture, and yet appears necessary to protect farmers' incomes. This "temporary" policy has been in existence for 15 years.

What is required is that the net effect of all policy measures should be to reduce wheat production and maintain sales sufficiently to eliminate these surplus stocks as soon as possible. One way in which this might be achieved is by using the money now spent under the Temporary Wheat Reserves Act to direct resources from wheat production to the production of other crops for which there are growing markets.

TABLE 3
Canadian Wheat Board Carryover and Carrying Charges Under the
Temporary Wheat Reserves Act, 1955 to 1968

Year	Licensed Elevator Capacity (at July 31)	Number of Bushels in Storage (at August 1)	Number of Bushels in Storage in Excess of 178 Million Bushels (at August 1)	Carrying chgs. Paid During Crop Year (beg. August 1)
		(million bushels)		(\$ thousand)
1955.....	586	395	217	31,486
1956.....	615	373	195	28,817
1957.....	628	408	230	35,554
1958.....	637	406	228	39,825
1959.....	642	417	239	43,604
1960.....	639	455	277	50,431
1961.....	649	440	262	47,974
1962.....	644	324	146	28,897
1963.....	660	416	238	44,934
1964.....	669	328	150	28,568
1965.....	676	396	218	40,926
1966.....	678	306	128	24,294
1967.....	682	358	180	34,980
1968.....	682	432	254	55,879

SOURCE: Garland, S. W. and Hudson, S. C. *Government Involvement in Agriculture*

⁹ See *Coarse Grains Quarterly*, August, 1969, Dominion Bureau of Statistics, Ottawa.

THE PRAIRIE GRAIN ADVANCE PAYMENTS ACT

Because of the large accumulated surpluses of grain in the mid 1950's and the growing lack of space in the country elevator system to accommodate farm deliveries of grain, the Federal Government enacted the Prairie Grain Advance Payments legislation in November, 1957. This legislation provided for advance payments to producers on a portion of their farm-stored grain. Normally, grain producers do not receive any payment for their wheat, oats or barley until the grain is delivered to the elevator.

Under the original terms of the legislation the Wheat Board was authorized to make advance payments to producers on farm stored wheat, oats and barley at the rate of 50 cents per bushel for wheat, 20 cents for oats and 35 cents per bushel for barley, subject to a limitation of the deliverable quantity of grain (i.e. up to six bushels per specified acre quota) and to a maximum amount of \$3,000 for each applicant. Under an amendment of the legislation in October, 1968, the size of the advance payment was increased to \$1 per bushel for wheat, 40 cents per bushel for oats and 70 cents per bushel for barley up to a six-bushel per specified acre quota and a maximum of \$6,000 per applicant.

The recipient of a cash advance is obligated to deliver enough grain until half of the initial payment for the grain is equal to the cash advance made to him.

The number and size of the advance payments made to grain producers since the inception of the program are noted in Table 4. The largest number of advance payments were made during the crop year 1968-69 and will be much bigger still in 1969-70. The cost to the Federal Government of the interest-free cash advances to grain producers has ranged from a low of \$385,962 in 1961-62 to nearly a \$1.4 million in 1960-61, and will be far bigger in 1968-69 and 1969-70 with both larger advances and higher commercial rates of interest.

For the first time since the inception of the program, a large number of grain producers receiving advance payments were unable to deliver sufficient grain during the 1968-69 crop year to repay the advances. On July 31, 1969, approximately \$41.5 million in cash advances were still outstanding. In spite of the outstanding advances for the crop year 1968-69, these same producers were eligible for full advances for the new crop year 1969-70. Indeed, by the end of September, 1969, another 22,000 new advances had been made for a total of some \$57 million to that time for the 1969-70 crop year. It is anticipated that the total cash advances taken during the 1969-70 crop year will be very large in view of the difficulty in marketing grain.¹⁰

The value of the cash advance program to prairie grain producers during years when they are unable to make deliveries can not be doubted. However, the cash advances program should be designed to cope with periodic or

¹⁰ If all eligible producers apply for advance in the 1969-70 crop year the total extended could go well beyond \$300 million.

TABLE 4
Payments Under the Prairie Grain Advance Payments Act 1957-58 to 1968-69

Crop Year	Number of Applications	Total Amount Advanced	Average Amount Advanced	Advances Outstanding at Crop Year-End		Total Cost (Interest Charge)
				Amount	As % of Total Amount Advanced	
		\$000	\$	\$		
1957-58.....	50,412	35,203	698	3,324	0.009	480,531
1958-59.....	45,341	34,370	758	3,920	0.011	524,407
1959-60.....	50,047	38,493	769	4,683	0.012	816,502
1960-61.....	76,089	63,913	839	10,695	0.017	1,417,719
1961-62.....	22,342	16,657	745	9,725	0.058	385,962
1962-63.....	39,683	29,252	737	8,935	0.031	489,513
1963-64.....	63,427	62,136	980	20,829	0.034	869,552
1964-65.....	38,375	32,962	859	22,162	0.067	540,360
1965-66.....	43,509	40,600	933	37,943	0.094	665,826
1966-67.....	36,953	36,668	992	91,759	0.251	540,180
1967-68.....	45,811	47,281	1,032	1,703,349	3.857	780,018
1968-69.....	113,491	151,852	1,338	41,488,104	27.321	n.a.

SOURCE: Channon, J. W. *The Prairie Grain Advance Payments Act 1957-69*
Canadian Farm Economics, Vol. 4., No. 4, October 1969
Economic Branch, Canada Department of Agriculture, Ottawa

cyclic surpluses and not perennial overproduction or stock building. The program should not be used to insulate farmers from the realities of the market place or to encourage a chronic surplus of unmarketable grain. Nor should the cash advances program be employed to offset the harmful effects of other marketing policies or programs.

One further limitation of the cash advances program relates to basis for payment. It favours wheat and discriminates against barley and oats to the extent that a producer is encouraged to deliver the higher valued commodity, wheat, under the program (i.e. a producer received \$1 per bushel for wheat and 40 cents and 70 cents respectively for oats and barley up to a six-bushel per specified acre quota).

THE WHEAT BOARD GRAIN DELIVERY QUOTA SYSTEM

Because the amount of grain which producers want to deliver to elevators normally exceeds the elevator capacity available, the C.W.B. finds it necessary to impose delivery quotas for individual producers. A conflict of objectives arises between equity and efficiency. Equity demands that all producers be able to deliver roughly equal amounts of grain per acre regardless of the kind and grade they have produced, but efficiency demands that preference be given to the kind and grades in demand. Rapid movement of these grains and grades into markets would reduce storage costs and would tend to encourage the right kind of production related to market demand in the

future. This requires a flexible quota system which reflects market demand back to the producer. The Wheat Board's quota system is insufficiently flexible. Under the present quota policy, the natural tendency is for farmers to deliver the higher valued grains and grades first in order to obtain more cash. These grades may not reflect actual market demands, so that both surplus stocks and deficits may appear for different grains and grades, without this market demand being reflected back to the producer.

The quota system moreover discriminates against the more productive farmers and high yielding varieties since it is based on bushels per acre. It encourages larger acreage and larger output. The quota system should reflect the demands of the market and should not discourage efficient agricultural production.

FREIGHT ASSISTANCE POLICY FOR FEED GRAINS

A policy was introduced by the Federal Government in 1941 which provided for a subsidy on the transportation costs of feed grains from the Prairie Provinces to British Columbia and Eastern Canada. The policy was conceived during wartime conditions with the objective of encouraging greater livestock production in those regions of Canada in which feed grains were in deficit supply.

The program was administered by the Federal Department of Agriculture from its inception in 1941 to 1963 and the Department of Forestry from 1963 to 1967. In 1967, the Canadian Livestock Feed Board, which was established under the Livestock Feed Assistance Act of 1966, took over the administration of all matters relating to freight and storage assistance on feed grains.

The specific objectives of the Canadian Livestock Feed Board are to ensure:

1. The availability of feed grain to meet the needs of livestock feeders;
2. The availability of adequate storage space in Eastern Canada for feed grain to meet the needs of livestock feeders;
3. Reasonable stability in the price of feed grain in Eastern Canada and in British Columbia;
4. Fair equalization of feed grain prices in Eastern Canada and in British Columbia.¹¹

The total amount of the subsidy spent on feed freight assistance amounted to nearly \$456 million during the period 1941-67. Table 5 indicates the distribution of grains under the program among the recipient provinces. A diminishing proportion of the subsidy is going to Ontario and an increasing proportion to Quebec. The average subsidy per ton for the entire period 1941-67 ranged from \$4.96 for Ontario to \$23.60 for Newfoundland.

¹¹ For further details see, Garland, S. W. and Hudson, S. C. *Government Involvement in Agriculture*, a report prepared for the Federal Task Force on Agriculture; See also Annual Report of the Canadian Livestock Feed Board, Crop Year 1967-68.

The storage subsidy on feed grains amounts to 2.5 cents per bushel for the winter period when the grain is stored in Eastern Canada. Storage expenses paid by the Federal Government on winter supplies of feed grains in Eastern Canada totalled \$3.2 million from the inception of the storage program in 1963 until March 31, 1967.

TABLE 5
Selected Data on Feed Freight Assistance by Province, for the Period 1941-67

Province	Federal Government Expenditures	Proportion of grain shipped under the programs	Ave. subsidy payment per ton of feed shipped
	(thousand dollars)	%	\$
Ontario.....	128,343	38.9	4.96
Quebec.....	193,808	40.9	7.14
New Brunswick.....	27,578	3.9	10.73
Nova Scotia.....	42,659	5.5	11.78
Prince Edward Island.....	9,840	1.3	11.72
Newfoundland.....	8,522	0.05	23.60
British Columbia.....	45,090	9.0	7.65
Total.....	455,840	100.0	—

SOURCE: Annual Report of the Canadian Livestock Feed Board, Crop Year 1966-67

One of the basic contradictions of the feed grain economy in Canada may be noted in Table 7. In spite of a relatively large carryover of oats and barley in Canada each year, low non-quota prices for barley and oats in the Prairie Provinces and an annual Federal Government expenditure on feed freight assistance of 15 to 20 million dollars, considerable quantities of corn are imported into Eastern Canada each year paying a duty of eight cents per bushel. While a proportion of the imported corn is used for industrial purposes, a significant amount is used by Eastern livestock feeders.

In keeping with other major recommendations appearing later in this chapter the Task Force recommends that the freight subsidy on feed grain movement from the Montreal freight zone into Eastern Quebec and the Atlantic Provinces should be discontinued by August 1, 1970; further the Federal Government should make direct payments to the five provincial governments i.e. Quebec, Prince Edward Island, New Brunswick, Nova Scotia and Newfoundland of the equivalent of the average payment made over the past three years on all shipments beyond the Montreal freight zone. These payments should be used on projects designed to strengthen the agricultural sector, in whatever way the five provincial governments see fit, e.g. transportation or adjustment subsidies. These payments to the provincial govern-

ments should be a fixed annual sum for a period of five years commencing in 1970 and should then be gradually reduced for a further period of five years with a complete discontinuance of the subsidies by 1980.¹²

TABLE 6
Quantities of Western Feed Grain Moved Under the Feed Freight Assistance Program
1967-68

Province	Wheat	Oats	Barley	Rye	Screenings	Mill Feeds
	000 bus.	000 bus.	000 bus.	000 bus.	tons	tons
Newfoundland.....	155	175	288	33	1,369	7,501
Prince Edward Is.....	150	234	752	13	853	9,317
Nova Scotia.....	1,182	1,153	1,557	88	4,878	32,922
New Brunswick.....	276	931	962	71	4,915	31,251
Quebec.....	5,195	18,184	17,360	575	19,800	247,657
Ontario.....	1,925	11,762	10,163	338	34,995	141,803
British Columbia.....	2,064	2,219	4,195	50	5,237	30,310
Total.....	10,947	34,659	35,278	1,170	72,047	500,761

SOURCE: *Grain Trade Year Book 1967-68*, Winnipeg Grain Exchange

The feed freight subsidy from the Prairies into British Columbia and as far as the Montreal freight zone should be removed by August 1, 1970. The same recommendations should also apply to Ontario corn.

The tariff on American corn should be replaced by a variable import levy which would apply whenever free market corn prices in the United States fall below the United States floor price. If the support price were \$1.05 and the free market price 95 cents per bushel, the variable import levy would be 10 cents. This would provide protection against serious distress prices for Canadian corn growers.

While the marketing and pricing policies for feed grains sold through the Canadian Wheat Board will be examined in detail below, it is clear that the pricing policies of the C.W.B. together with the restriction on the inter-provincial movement of feed grains not sold through the Board have created some distinct anomalies in the feed grain economy in Canada.

LICENSING AND TARIFFS ON FEED GRAINS

Elsewhere in the report the Task Force has recommended a move to a free continental market for livestock and livestock products and indicated considerable possibilities for increased exports to the U.S.A. Competitive forces dictate that livestock producers must have access to feed grains on conditions comparable to their competitors south of the border.

¹² To the extent that the Federal Government exercises partial control over the expenditure of these funds, this should be through the Department of Regional Economic Expansion (David L. MacFarlane).

Currently the C.W.B. has the power to licence or refuse to licence imports of oats and barley, and there is a tariff of eight cents per bushel on corn.

The Task Force recommends that the Wheat Board's licensing power for feed grain imports be terminated on July 31, 1970, and that the tariff on corn be eliminated, and replaced by a variable import levy which would apply whenever free market corn prices in the U.S.A. fall below the United States floor price.

TABLE 7
Imports of Corn, Canada, by Crop Year, and Carryover of Barley and Oats

Crop Year	Barley Exports	Bushels of Corn Imported	Carryover at beginning of crop year		Price of Barley (3 C.W. 6)		Price of Oats (2 C.W.)		Total federal Government expenditures on feed freight assistance
			Barley	Oats	C.W.B.	Non-quota	C.W.B.	Non-quota	
	000 bus.	000 bus.	000 bus.	000 bus.	\$	\$	\$	\$	\$000
1958-59.....	70,444	13,318	118,165	156,916	1.01	0.70	0.69	0.44	22,442
1959-60.....	63,759	12,799	131,153	129,979	0.98	0.67	0.77	0.50	20,552
1960-61.....	47,178	21,407	128,470	100,827	1.05	0.67	0.74	0.52	19,519
1961-62.....	42,909	29,583	112,557	115,154	1.28	0.98	0.77	0.52	15,592
1962-63.....	15,377	31,172	57,824	79,066	1.13	0.93	0.72	n.a.	15,571
1963-64.....	46,935	23,423	89,245	150,278	1.18	0.74	0.69	0.63	19,445
1964-65.....	37,032	17,817	118,270	179,408	1.26	0.83	0.77	0.55	17,865
1965-66.....	38,029	23,897	88,776	130,121	1.29	n.a.	0.84	0.56	19,755
1966-67.....	58,542	22,871	97,752	127,163	n.a.	n.a.	n.a.	n.a.	20,600
1967-68.....	41,405	29,411	131,751	109,791	n.a.	n.a.	n.a.	n.a.	19,790
1968-69.....	20,500	33,700	130,600	77,000	n.a.	n.a.	n.a.	n.a.	n.a.
1969-70.....	n.a.	n.a.	197,700	128,400	n.a.	n.a.	n.a.	n.a.	n.a.
Average (1958-59 to 1967-68)....	46,161	22,570	107,396	127,870	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. — not available.

AGRICULTURAL POLICY AND THE CANADIAN WHEAT BOARD

A great deal of confusion exists between the broader policy issues of agriculture and the marketing of grain. This confusion has led to an increasingly critical debate about the role and responsibilities of the Canadian Wheat Board in the grain industry of Western Canada.

After 35 years of operations, the Wheat Board has become an integral, if not a dominant, part of the prairie grain economy. Its operations and activities pervade almost every aspect of the farm and grain marketing business in Western Canada. At times, indeed, it has become difficult to distinguish between the basic responsibilities of the Wheat Board and the more general aspects of government policy as it relates to the agricultural industry in the Prairie Provinces. Unless this distinction is made clear, however, the proper role and performance of the Canadian Wheat Board is difficult to evaluate.

The Wheat Board was designed originally to focus on the marketing of Canadian wheat. When the Board was first established in 1935, the Minister of Trade and Commerce announced at that time,¹³

The concentration of surplus stocks of wheat in Canada during the past few years has created an abnormal situation in the world wheat trade. Last June this situation was recognized by Parliament as not being in the interests of Canada or her wheat producers, and the Dominion Government desires to have our surplus restored to a normal basis. . . . It is not necessary to have and there will not be any 'fire sale' of Canadian wheat, but it will be for sale at competitive values and will not be held at exorbitant premiums over other wheats.

This statement, made in 1935, is remarkably appropriate in 1969. During the intervening years, many complex problems have beset the Canadian wheat industry and, Prairie farmers have come to look to the Wheat Board for the action to cure their ills. At times, the more general price and income problems of prairie grain producers appear to have been forced upon the Wheat Board.

That prairie grain producers have price and income problems is not to be denied. To permit these problems to dominate the policies of the Wheat Board, however, cannot but interfere seriously with its primary role as a marketing agency.¹⁴ It is the view of the Task Force that the farm income problem must be separated deliberately from Canadian Wheat Board operations. The Board should not be expected to provide any magic solution to the income problems on prairie farms.

The primary role of the Wheat Board must continue to be the sale of wheat and feed grains at the best possible competitive prices.

There is growing evidence, however, that the Canadian Wheat Board has had imposed on it policies and responsibilities for which it was not designed. The Temporary Wheat Reserves Act designed to alleviate farmers of the burden of carrying large surpluses of wheat, the Prairie Grain Advance Payments Act developed to provide farmers with cash when markets were glutted, the provision for accelerated depreciation on farm grain storage facilities, the setting of excessively high price minima under the International Grains Arrangement and the political pressure for equal treatment of farmers under the grain delivery quota system, have all forced the Wheat Board into a surplus management function. Storage and inventory control are the necessary parts of any marketing function but they should be regarded as the means for stabilization and as aids in marketing, not as serving equity objectives or separate income objectives or as ends in themselves.

¹³ *Annual Report, The Canadian Wheat Board, 1935-36.*

¹⁴ Justice W. F. A. Turgeon noted in *Report of the Royal Grain Inquiry Commission, 1938*, "In most of the representations made to me for the creation of a Wheat Board the underlying principle seemed to be that of government guaranteed minimum price for wheat. Conditions may well recur where the government will feel in duty bound to assist wheat growers, by protecting those who have a crop against a disastrous fall in prices, or by providing in whole or in part for the subsistence of those who have no crop or an insufficient one. These two cases of need may occur at the same time or at separate times. In either case, there is no necessity of setting up a compulsory marketing board to deal with the situation."

The Wheat Board quota system appears to have had as its primary objective the equal treatment of grain producers, a worthy goal in itself but frequently in conflict with the objective of marketing efficiency. A marketing system clogged with types and grades of grain which may not be required at a given time or place cannot respond as rapidly or as effectively as it should to the dynamic and constantly changing conditions of a highly competitive market. The pressures generated by the Temporary Wheat Reserves Act to fill the pipe line with wheat on July 31 adds to the problem and reduces flexibility in marketing.

The pressure exerted by prairie grain producers on the Wheat Board to increase grain prices, a perfectly understandable position in view of the growing price-cost squeeze in agriculture, does not appear to be consistent with the need for a more flexible and competitive pricing policy by the Board. High prices are hardly a virtue if the grain must be stored or if markets are lost. The setting of initial prices by the Federal Government at the beginning of each crop year generally establishes the price level above which the Wheat Board is expected to operate regardless of competitive market conditions. The fact that the initial prices set by the Government during the last year appear to have been above competitive market prices has been recognized in the form of a "two-price" system for wheat and barley sold in the export market.

The Task Force does not suggest that problems of periodic surpluses, low incomes, inflation, instability of prices and incomes and the price-cost squeeze are not of paramount concern to Prairie grain producers. They are. But it is wrong, in fact it could be fatal, if the Wheat Board, a marketing agency, is expected to solve these more general problems and issues, or if these broader policy issues are imposed on the grain marketing system.

These problems are far too vast and complex for any other than a comprehensive policy approach to the agricultural industry. This is not to say that the Wheat Board should be absolved of its responsibility in dealing with the very difficult problems associated with the marketing of grain—this is its job—but the Board should not be expected to undertake responsibilities which go beyond its capacity as a marketing agency.

The Canadian Wheat Board is basically a marketing agency and it is in this role that it must be judged.

Even when the broader agricultural policy issues are set aside, the Wheat Board faces many difficulties as a compulsory marketing agency. These difficulties were anticipated by Chief Justice Turgeon as early as 1938:¹⁵

... any group of men endeavoring with the best intentions in the world to make a success of selling wheat would be exposed to a great deal of criticism.

Turgeon suggested that this criticism would apply with even greater force to a government board. He pointed out that members of a compulsory

¹⁵ See Report of the Royal Grain Inquiry Commission, 1938, Ottawa; also MacGibbon, D. A. *the Canadian Grain Trade, 1931-1951*, University of Toronto Press, 1952, pp. 43 ff.

government board would be answerable not only to the producers who believed in the board, but those who did not believe in it, and who would protest against what they considered to high-handed interference. He emphasized that in the light of past experience, one could conclude that as time went on such a board would suffer more and more from the atmosphere of political controversy that would surround it.

In his penetrating study of grain marketing in Western Canada, MacGibbon warned,¹⁶

...there is the weighty consideration that where control of a country's disposable surplus rests with one body, if its decisions are influenced by political considerations or if it misjudges the future trend of wheat values, the effects are widespread and may entail heavy losses which have to be borne by the taxpayer or by the producers themselves.

The Task Force finds these two quotations to be only too applicable in 1969. A group of men of the finest intentions and great experience and ability have, through force of circumstances and political pressure and inadequate research on markets, been party to a development which now will truly "entail heavy losses which have to be borne by the taxpayer or by the producers themselves." Most of the rest of this chapter will deal with some of these heavy losses by taxpayers and producers and the way to avoid them in the future.

The Wheat Board's task of marketing grain during recent years has been complicated by a growing array of trading restrictions and obstacles in the international markets of the world. Export subsidies, import quotas and levies, barter and give-away programs, sales for foreign currency and the increasing use of domestic subsidies by traditionally importing countries to bring about a greater degree of self-sufficiency in grain production have made it increasingly difficult for Canada to compete in the export markets. Given these difficulties, however, there are several aspects of the Wheat Board's marketing policies and practices which merit further examination.

One area of concern relating to the Wheat Board's operation appears to be the lack of effective communication between the Board which markets the grain and the farmers who grow it.¹⁷ A new generation of farmers, who remember nothing about and know little of the origins of the Canadian Wheat Board in 1935, view the Board as an increasingly remote and bureaucratic institution. The failure of the Board to communicate with farmers has created frustration and criticism, problems which should be taken seriously and quickly corrected.

While the Task Force recognizes the need for confidentiality in terms of the specific operations of the Board, it does suggest, however, that the basic

¹⁶ MacGibbon, D. A. *ibid.*, p. 214.

¹⁷ See, for example, Parker, L. E., "The Producer's Role in the Marketing of Farm Products", a paper delivered to Farm Conference Week, The University of Manitoba, February, 1969. This paper was presented on behalf of the Carman District Farm Business Association, a group of commercial farmers which spent several months obtaining information relating to the grain marketing system.

policies and general operating principles of the Wheat Board should be more widely understood. The Task Force was impressed by the general lack of knowledge about the functions and responsibilities of the Board among producers in whose interest the Board is supposed to operate and the general grain trade with whom the Board is expected to deal. To put it more bluntly, the Task Force is apprehensive about the growing frustrations and antagonisms which are beginning to pervade the Canadian grain industry.

The Canadian Wheat Board is a public corporation, and like all public corporations, its policies and general operating procedures should be fully understood if it is to retain the confidence and support of the public in the performance of its duties.

One of the more serious criticisms of the Board relates to its lack of attention to marketing research. The Task Force finds it inconceivable that an organization whose annual volume of business exceeds one billion dollars, should have devoted so little attention or funds to the development of a comprehensive program of marketing research.¹⁸ It seems fair to suggest that many of the problems and difficulties recently encountered by the Wheat Board could have been anticipated and possibly avoided had a continuing program of marketing research been a part of the Board's operations. The Task Force notes that much of the data and information which it obtained with respect to Canadian grain marketing came from sources external to Canada. It should be noted, however, that the Board is not alone in its lack of emphasis on marketing research. The Task Force has noted elsewhere in this Report that very little of the agricultural research dollar in Canada has been devoted to marketing.

Another area in which the Wheat Board has received considerable criticism during recent years relates to its marketing and pricing practices for feed grains. These criticisms have been dealt with at length in earlier sections of this Report. As the sole seller of feed grains at the primary level of marketing, the Wheat Board has considerable latitude as to how and at what level prices are set for feed grains. In terms of the evidence available, and from interviews which the Task Force had with several persons knowledgeable in the grain industry, it appears that Canada has not been competitive in the feed grain export markets of the world, in large part because of the lack of flexibility and competitiveness in the Board's pricing practices. In spite of feed freight assistance, distress prices for non-quota sales, the large carry-over of feed grains and shortage of cash in the Prairies, imports of corn from the United States increased from 23 million bushels in 1966-67 to 34 million bushels in 1968-69.

¹⁸ Parker, L. E. *ibid.*, Parker noted, "The Board readily admits to a lack of research in market analysis The Board has seldom farmed out any research work. At the present time two Ph.D. theses are being concluded at the University of Wisconsin with Canadian Wheat Board financial assistance." Parker noted that no financial support was provided by the Board for market research at Western Canadian universities. It should be noted that the Wheat Board has recently hired several marketing specialists.

During this period, the prices for feed grains were held at a high and relatively stable level, a virtue when grain is moving but a dangerous course of action to follow during periods of surplus supplies and intense competition in the market place. High and stable prices are hardly in the best interests of the prairie grain producer if the grain must be stored or if potential sales are lost.

During recent years, considerable criticism has been aimed at the handling and transportation of grains in Western Canada. The Wheat Board has major responsibility to see that the right types and grades of grain are moved at a specified time to a given destination. To the extent that these marketing functions are not fulfilled, delay and frustration are created, excessive handling and storage costs are incurred, and potential customers for Canadian grains may be driven to alternative sources of supply. The movement of the right types and grades of grain to the West Coast ports has been replete with difficulties during recent years. It is recognized that part of the difficulty has been due to government policies which have forced the Wheat Board into a surplus management and storage role, but the fact remains that the Board is charged with the responsibility for moving marketable supplies of grain into position for sale. It is hoped that the recently developed Block Shipping System would eliminate many of the difficulties which have been involved in the transportation and movement of grain.

The Task Force has recommended that a clear distinction should be made between the basic responsibilities of the Wheat Board and the more general aspects of governmental policy as it relates to the agricultural industry in the Prairie Provinces. In making this recommendation, however, the Task Force does not advocate that the Wheat Board or the wheat economy should be isolated from the rest of the agricultural industry or from policies relating to agriculture.

On the contrary, policies for the Wheat Board and for the wheat economy should be an integral part of overall policy for the Canadian agricultural industry; there is an urgent need for closer co-ordination and planning among the various institutions, policies and programs relating to agriculture, including the wheat industry.

At the present time, for example, several departments of government, a multitude of policies and many institutions are involved in the production, marketing and distribution of wheat. This proliferation must make planning and co-ordination extremely difficult and complex, if not impossible. The Board of Grain Commissioners, which operates under the jurisdiction of the Department of Agriculture, is responsible for many policies and programs relating to the Canadian grain industry including inspection and grading of grain, official weighing of grain at terminal and mill elevators, compilation of statistics relating to handling and storage of grain, licensing of elevator operators and grain dealers, operation of the Canadian Government Elevators System and a research program relating to many aspects of plant breeding and quality of cereal grains and oilseeds.

In addition to the specific policies and responsibilities outlined above, the Department of Agriculture is responsible for a large number of policies and programs which relate directly and indirectly to the Canadian grain industry, such as credit, Feed Freight Assistance and livestock programs.

The Canadian Wheat Board, previously reporting directly to the Minister of Trade and Commerce and, more recently, to a separate Minister of the Federal Cabinet, has responsibility for many functions described above. Transportation, an extremely important aspect of grain marketing and distribution, remains the primary responsibility of the Department of Transport. The Canadian Livestock Feed Board, which is responsible for the availability, pricing and storage of feed grains in Eastern Canada, reports to the Minister of Agriculture. The Canada Grains Council which was developed recently with the idea of attempting to bring about a greater degree of co-ordination among the various agencies involved in the grain industry, reports to both the Minister of Agriculture and the Minister of Trade and Commerce. More recently, the Federal Government announced the establishment of a "Grain Group" composed of members from the Departments of Agriculture, Industry, Trade and Commerce, and Transport and chaired by the Minister responsible for the Wheat Board. The primary responsibility of this Group is to co-ordinate policies relating to the export sales of wheat.

The need for greater integration and co-ordination among the various policies and programs relating to the grain industry in Canada is obvious. Equally obvious are the complex issues and difficulties involved in bringing about greater integration and co-ordination among the various agencies and policies within the grain industry. The problem is further complicated by the fact that a "grains policy" must be closely related to general agricultural policy in Canada.

There are several alternative approaches which could be adopted; each will have definite advantages and limitations. After weighing the evidence, the Task Force can see no valid reason why wheat, or grains in general for that matter, should be treated differently, or in isolation from other commodities or sectors of the agricultural industry. Accordingly, the Task Force recommends that grains policy in Canada should be the primary responsibility of the Department of Agricultural Industry (now the Department of Agriculture).

Furthermore, it is recommended that the responsibility for the Canadian Wheat Board should be transferred to the Federal Department of Agricultural Industry.

One Minister and one Department must assume primary responsibility for the formulation and administration of policies relating to the Canadian grain industry if the type of integration and co-ordination so desperately needed is to be achieved.

DEMAND PROSPECTS FOR CANADIAN WHEAT

World wheat production increased by about 50 per cent in the ten-year period ending in 1964-65 and more slowly, at about three per cent per year since 1964-65. The U.S.S.R. is by far the largest producer of wheat in the world followed by Western Europe and the United States in that order. Canada, by contrast, produced only 5.7 per cent of the total world wheat supply during the 1968-69 crop year.

World imports of wheat increased more rapidly than production up to 1965-66, almost doubling in a decade. However, about one-third of this increase was in the form of concessional exports or food aid (U.S. aid shipments of wheat in 1965-66 were some 583 million bushels). When the United States reduced its aid shipments in 1966-67 to 414 million bushels, world wheat trade decreased by almost exactly the same amount. In 1967-68 world wheat trade declined by about 15 per cent. World *commercial* exports of wheat rose rapidly in 1965-66 and then declined in 1966-67 and 1967-68 to a level below that of the early 1960's. World exports of wheat have shown great variability depending upon yields in importing countries, especially the Communist countries. In the case of the U.S.S.R., for example, wheat imports rose to 8.8 million tons in 1963-64, declined to 2.6 million tons in the following year and increased to a peak of 9.2 million tons in 1965-66. Since that time the imports of wheat by the U.S.S.R. have declined reaching a low of 1.5 million tons in 1967-68.

During the period 1956-61, the average annual exports of wheat from Canada amounted to 260 million bushels. Approximately 82 per cent of Canada's wheat exports went to developed countries, ten per cent to the developing countries and approximately eight per cent to the centrally planned countries.¹⁹ Since that period, very significant changes have taken place in the pattern of Canada's wheat export trade. During the period 1961-66, the proportion of Canada's wheat exports going to developed countries declined to 47 per cent of the total while the proportion going to the centrally planned countries increased from eight per cent in the earlier period to 45.4 per cent five years later. A small but increasing proportion of Canada's wheat exports has gone to the developing countries.

During the 1950's, over half of Canada's wheat exports went to Britain and the E.E.C. countries; in 1968-69 this proportion had dropped to slightly over one-third of the total quantity exported. During the same period, Mainland China has become a significant importer of Canadian wheat, taking nearly 30 per cent of the amount exported in 1968-69. The greatest variation in Canada's wheat export trade was associated with the U.S.S.R. whose imports varied from a high of 198 million bushels in 1965-66 to a low of

¹⁹ The Developed Countries include the E.E.C., Britain, other western European countries, Japan and South Africa; the developing countries include Africa, Asia and the western Hemisphere; the centrally planned countries include Eastern Europe, U.S.S.R., Mainland China, North Korea and Cuba.

1.7 million bushels in 1968-69. Russia's imports of Canadian wheat have been closely associated with the size of the Russian crop which has tended to vary considerably from year to year.

Canada's share of the total world wheat import trade during the past decade reached a high of 26.8 per cent in 1963-64 and dropped to a low of 17.2 per cent in 1967-68. Approximately half of British imports of wheat continues to be supplied by Canada. Canada's wheat exports to the E.E.C. countries have constituted from one-quarter to over one-third of these countries' total wheat import needs during the past decade. Canadian wheat continues to occupy a relatively important position in Japan, the U.S.S.R. and Mainland China although the proportion of Canadian wheat imported tends to vary substantially from year to year.

One of the major factors influencing the pattern of Canadian wheat export trade has been the export policies and programs of the United States. The United States wheat exports depended heavily upon Public Law 480 from 1954 to 1966. In 1964-65 almost 80 per cent of the wheat exports from the United States were in the form of concessional sales.²⁰ In 1965-66, U.S. wheat exports consisted of 583 million bushels of concessional sales and only 277 million bushels of commercial sales for total exports of 860 million bushels. Simultaneously the United States imposed wheat acreage restrictions as something of a counterweight to her high support prices and in 1966 her stocks had fallen to what was regarded by U.S. government officials as an undesirably low level.

The year 1966 marked a series of major changes in U.S. wheat policy, all of which affected Canada adversely. The U.S. wheat acreage allotment was increased by about 30 per cent, a modified two-price system was introduced using domestic milling certificates, and aggressive selling in commercial markets supplanted much of the earlier emphasis on food aid. Between 1965-66 and 1966-67, U.S. concessional sales dropped from 583 to 414 million bushels but commercial exports increased from 277 to 333 million bushels. In 1967-68 the U.S. was the only major exporter to increase its wheat exports, while total world exports declined by about 15 per cent, and Canadian exports declined almost 40 per cent. Fortunately for Canada, U.S. allotments have been cut from 68 million acres in 1967 to 59 million acres in 1968 and to 51.6 million in 1969.

In other words, the United States has reduced, in recent years, its emphasis on disposing of surpluses in non-commercial markets and has become, with the aid of its lower support prices and the use of a two-price system and export credits, an aggressive competitor for the stagnant commercial wheat market. It is clear that Canada faces increased competition from the U.S.A. in all wheat markets. Canada has already lost a share of the world wheat market to the United States, and may lose even more unless

²⁰ Concessional sales include both Public Law 480 shipments and non-commercial soft credit sales.

our wheat exports remain fully competitive, not only in price and credit conditions, but also in quality, including protein content.

Indeed, the relative amounts of wheat stocks held by Canada and the United States have changed quite substantially during the past ten years. During the period 1956-61 the average wheat stocks held by Canada amounted to 17.3 million metric tons compared to 31.6 million tons for the United States. By 1967-68, the wheat stocks held by Canada exceeded by 3.4 million tons the wheat stocks in the United States. In fact, Canada had over one-half of the total wheat stock held by the four principal wheat exporting countries of the world. Roughly the same situation held at the end of the 1968-69 crop year.

Projections made by F.A.O. concerning production and consumption of wheat in importing countries by 1975 are given in Table 8. For the period 1961-63, the overall gap between production and consumption amounted to 38.8 million metric tons for the wheat importing countries of the world. Under a low growth assumption, the gap for 1975 is projected to be approximately 41 million metric tons. Under a high growth assumption, the gap between production and consumption for the wheat importing countries is expected to be around 20 million metric tons.

The F.A.O. projections indicate that the "developed" importing countries will likely increase their production by 34 per cent by 1975 and their consumption by around 18 per cent.²¹ This would narrow the deficit from 13 million tons in 1961-63 to around 6 or 7 million tons by 1975.

The "developing" countries are expected to increase their production anywhere from 35 to 85 per cent by 1975 while the consumption of wheat is projected to increase by about 50 per cent. Under a high growth rate, it is expected that the developing countries will not increase their imports of wheat, while under a low growth rate wheat imports could increase to around 28 million tons (compared to 16.5 million tons annually in 1961-63) by 1975. Not only level of income but the rapidity with which new production technologies are adopted, particularly the new Mexican wheat varieties, will determine the quantity of wheat which will be imported by the developing countries. The implications are obvious for Canada's wheat economy.

According to the F.A.O. projections, the deficit of the centrally planned economies could vary anywhere from 6 million tons of wheat to a slight surplus position of one million tons (Table 8) depending on whether those countries achieve a low or a high growth rate by 1975. Under the low growth rate assumption, it is projected that wheat production in the centrally planned economies will increase by 31 per cent and under a high growth rate, production is projected to increase by 45 per cent by 1975. The projected increase in wheat consumption by 1975 is expected to be about 27 per cent greater than during the period 1961-63.

²¹ Agricultural commodities—Projections for 1975 and 1985, Vol. I F.A.O. 1967.

TABLE 8
Projected Consumption and Production of Wheat in Importing Countries 1975

Region and Country	1961-63 average		Trade	Low G.D.P. 1975		High G.D.P. 1975	
	Production	Consumption		Production	Consumption	Production	Consumption
(millions metric tons)							
<i>Developed Countries</i>							
U.K.....	3.1	7.6	4.5	5.4	7.9	5.4	7.8
E.E.C.....	25.8	27.0	1.2	35.0	31.9	35.0	31.5
Other North Europe....	3.2	4.2	1.0	3.5	4.5	3.5	4.4
South Europe.....	17.3	20.1	3.0	22.9	23.5	22.9	22.7
Japan.....	1.4	4.3	3.0	1.1	6.6	1.1	7.1
New Zealand.....	0.2	0.4	0.2	0.4	0.3	0.4	0.5
South Africa.....	0.8	1.0	0.2	1.1	1.4	1.1	1.4
Total.....	51.8	64.6	13.0	69.4	76.3	69.4	75.4
<i>Developing Countries</i>							
Latin America.....	4.1	8.7	4.7	5.5	13.0	7.0	13.5
Africa.....	3.2	4.7	1.5	4.5	6.9	5.7	7.2
Near East.....	8.7	11.3	3.0	10.8	16.3	14.0	16.6
Far East.....	15.7	22.6	7.3	22.2	35.0	32.5	36.6
Total.....	31.7	47.3	16.5	43.0	71.2	59.2	73.9
<i>Centrally Planned Countries</i>							
U.S.S.R.....	50.0	49.2	-0.8	59.6	57.5	64.4	56.1
Eastern Europe.....	13.6	18.1	5.1	17.4	20.2	18.0	20.3
China Mainland.....	19.7	24.5	5.0	30.3	35.4	31.8	36.9
Total.....	83.3	91.8	9.3	107.3	113.1	114.2	113.3
Totals.....	166.8	203.7	38.8	219.7	260.6	242.8	262.6

SOURCE: *Agricultural Commodities—Projections for 1975 and 1985*, Volume I, F.A.O. Rome, 1967.

The above projections will serve as part of the background for the forecasts of Canadian wheat exports presented below.

Sales to the United Kingdom (Marquis quality)

Exports of wheat and flour from Canada to Britain have declined steadily from 161 million bushels in 1947-48 to 69 million bushels in 1967-68 and 56 million bushels in 1968-69. Total British wheat imports fell by about 30

million bushels in the past ten years, almost all of it accounted for by the decline in imports from Canada.²² Table 9 indicates that Canadian exports to Britain have not fluctuated as much as exports from other countries.

The British market prospect appears weak in the future because of increased effort on the part of the British to save foreign exchange by reducing imports. A report by the British Economic Development Committee for Agriculture in June, 1968, recommended an increase in domestic wheat production from 3.8 to 5.7 million long tons by 1972-73. The proposed increase in domestic production of two million long tons represents nearly one-half of British wheat imports. On the other hand, a substantial part of this proposed increase would be of feed rather than milling wheats. A further indication of British emphasis on reduction of imports was the higher floor price for wheat imports introduced as a protective measure in August 1968.

Canadian exports to Britain by 1980 should be 50 to 80 million bushels. F.A.O. projections show total British imports declining substantially as domestic production increases. However, with larger volumes of domestic filler wheat it is felt that imports of Canadian high quality wheat will be required in fairly steady volume.

If Canada is to retain the British wheat market, however, substantial changes will be called for in Canada's wheat grading system. In particular, some form of protein grading will have to be adopted. With the introduction of the Chorleywood Baking Process in 1960, a larger proportion of "soft wheats" can be used in the bread-making process.²³ Bread which formerly required 60 to 75 per cent hard wheat can now be produced with 75 per cent soft wheat and 25 per cent hard wheat. The hard wheat used in the Chorleywood Baking Process must be of a high protein content and a uniform quality. Under Canada's present grading system, it is becoming increasingly difficult to provide the British milling industry with the type of hard wheat required. On the other hand, the United States, Australia and the U.S.S.R. are in a position to offer hard wheat on a guaranteed protein basis to the United Kingdom. Accordingly, Canada must compete on a similar basis or ultimately lose her traditional wheat markets in Britain.

This situation in the British market is being repeated in Germany, Holland, Belgium and France, and most other areas where protein levels in domestically produced wheats are relatively low. In general, in countries where there is a high production of soft wheat the requirements are for imports of high protein hard wheats of maximum protein uniformity; over-all quantities of imported wheats will decrease but the business will go to those countries able to guarantee high-protein hard wheats.

²² Much of the decline in Canadian exports to Britain was taken over by the United States, Australia and at times by the U.S.S.R., who were in a position to guarantee hard wheats of a high protein level, something which Canada was unable to do. For further detail see Irvine, G. N., "Technological Advances in the Milling and Baking Industries and Their Effects upon Markets for Canadian Wheat", a paper presented to a Wheat Marketing Seminar, Department of Agricultural Economics, University of Manitoba, December 3, 1969.

²³ Irvine, G. N., *op. cit.*

TABLE 9
United Kingdom Wheat Imports, 1957-58 to 1967-68

Year	Canada	U.S.A.	Australia	Argentina	USSR	France	Others	Total
(millions of bushels)								
1957-58.....	102	22	12	10	2	27	5	180
1958-59.....	103	26	23	18	5	5	11	191
1959-60.....	94	23	23	10	4	5	4	163
1960-61.....	89	18	29	8	11	4	4	163
1961-62.....	86	17	26	13	12	7	5	167
1962-63.....	89	3	15	10	14	5	12	152
1963-64.....	88	19	30	3	3	20	12	175
1964-65.....	82	9	22	18	—	9	14	154
1965-66.....	78	30	25	12	—	14	8	167
1966-67.....	73	26	15	8	—	3	23	148
1967-68.....	69	10	23	2	5	11	30	150

SOURCE: International Wheat Council. *Review of World Situation*.

Sales to the European Economic Community (Marquis quality)

Total wheat imports including those from Canada into the E.E.C. have shown a moderate decline over the past decade. Exports from Canada declined from an average of about 60 million bushels in 1957-60 to an average of about 50 million bushels in 1965-68. This is largely due to the highly protective variable import levies, offering protection equivalent to a tariff of almost 100 per cent. These levies have encouraged domestic production at high prices. At the same time, the E.E.C. grants export subsidies equivalent to the difference between the E.E.C. domestic price and prices required to make sales in export markets. The export subsidies have, in addition, affected Canadian exports in other markets.²⁴

Unless these costly policies of protectionism and subsidies are changed, the outlook is for a continuing gradual decline in Canada's wheat exports to the E.E.C., which are already challenged by the increasing U.S. exports and active U.S. wheat export promotion. A reasonable forecast for 1980 might be of the order of 40 million bushels. The F.A.O. forecasts the E.E.C. to become a net exporter of wheat by 1975. However, there should continue to be a fairly steady demand for Canadian high quality wheat for bread making.

It is recognized that the high cost of the subsidies involved under the present E.E.C. agricultural policies is coming under considerable criticism. Should the subsidies be reduced, the outlook for Canadian wheat exports to the E.E.C. and to countries presently buying subsidized wheat from France should brighten accordingly.

²⁴ For details concerning trade policies of E.E.C. and other areas, see Chapter 4, International Trade.

TABLE 10
E.E.C. Countries Imports of Wheat, 1957-58 to 1967-68

Year	Canada	U.S.A.	Australia	Argentina	USSR	France	Other	Totals
(millions of bushels)								
1957-58.....	70	40	10	24	—	24	35	203
1958-59.....	58	43	1	22	16	11	39	190
1959-60.....	47	32	4	20	10	19	27	159
1960-61.....	75	77	22	15	23	20	20	252
1961-62.....	67	69	20	38	11	22	21	248
1962-63.....	52	26	2	20	9	6	16	131
1963-64.....	65	71	8	23	2	19	11	199
1964-65.....	53	29	—	50	—	22	10	164
1965-66.....	44	72	—	32	—	27	12	187
1966-67.....	55	61	4	22	1	18	11	177
1967-68.....	41	55	5	17	1	33	17	169

SOURCE: Hedlin, Menzies: *The Wheat and Oil Seeds Economy in Canada*. A Study for the Task Force.

Sales to Other Western European Countries

(Switzerland, Norway, Denmark, Austria, Eire) (Marquis quality)

Canada's exports to other Western European countries have declined by more than one-third in the past decade, from an average of 17 million bushels in 1957-60 to an average of 11 million bushels in 1965-68, due to increased competition particularly from the United States and France. Canada's exports to these countries are likely to continue at about 10 million bushels per year to 1980, for reasons similar to those indicated for the U.K. and the E.E.C.

Sales to Japan

(Marquis quality)

Japan's total wheat imports have shown spectacular growth over the past 15 years, more than tripling between 1952-53 and 1966-67 to a level of about 159 million bushels. Canadian wheat exports to Japan shared in this growth, and amounted to about 60 million bushels in 1966-67, though only some 40 million bushels in 1967-68. It should be noted here that the fear of a world shortage of wheat in 1966-67 was the main impetus behind the increased imports of Canadian wheat by Japan in that year. The decline of imports by Japan in the following year represented a move to average out the wheat imports from Canada around the more normal requirements of the country.

The Japanese market for wheat is likely to continue growing strongly. Sales to Japan depend on competitive pricing as well as quality.²⁵ If Canadian

²⁵ See Irvine G. N. *ibid* Dr. Irvine warns that the changes which have taken place in the baking industry in Britain will spread to Japan. When this occurs, Canada must be in a position to provide bread wheats of a guaranteed protein level to the Japanese market if she is to remain competitive in this market.

prices and quality are competitive, Canada's wheat exports to Japan by 1980 should be around 80 million bushels. Competition is increasing, however, from lower priced French, Australian and Argentinian wheat as well as from American wheat.

Sales through Flour-Markets other than the U.K.
(Marquis quality)

Canadian exports of wheat flour have declined rapidly in recent years, as importing countries have increased their milling capacity. Flour exports (other than to the U.K.) totalled some 32 million bushels in 1965-66, 26 million bushels in 1966-67, and 22 million bushels in 1967-68 (half of which went to Cuba).

The outlook for flour exports is one of continuing decline, unless flour is included in aid programs. Export prospects for 1980 could be about 10 million bushels.

Sales in Canada for Human Consumption
(Marquis quality)

Canadian human consumption of wheat for bread, cakes, pastry, pasta, etc. has risen from 40 million bushels in 1946-47, to 46 million bushels in 1956-57, and 56 million bushels in 1966-67, showing a fairly steady increase of about 2 per cent per annum. This increase may be projected to 1980, giving human consumption of wheat in Canada of some 70 million bushels by that date.

Sales of Lower Quality Wheat

(a) *The U.S.S.R.*

The Soviet Union is the world's largest wheat producing and consuming area, normally producing as much as Canada, the United States, Australia and Argentina combined. The important point to be noted is that a 15 per cent change in Russian wheat production is equivalent to total Canadian wheat exports. In view of the fact that production in the U.S.S.R. is extremely variable, predictions as to Russian imports are hazardous in the extreme. Consumption of wheat per capita varies from 150 per cent to 250 per cent of U.S. consumption.

The longer-run prospects for Canadian wheat exports to the U.S.S.R. depend both upon the latter's domestic production and upon negotiations respecting new contracts, which in turn depend partly upon price. Import supplies are small relative to domestic supplies in the U.S.S.R. As a result Canadian export prospects are difficult to assess. Nevertheless, it is unlikely that Canada can maintain a near monopoly position in export sales to Russia, especially if Canadian wheat sells at premium prices. With increasing domestic production in the U.S.S.R. and the likelihood of increasing

competition from lower-priced wheat exporters, there is a reasonable probability that Canada's wheat exports to the U.S.S.R. will decline to around 10 to 20 million bushels by 1980. In future, the Soviet Union is likely to be a surplus producing area, as indicated by F.A.O. projections, except when bad weather leads to crop failures. A small volume of exports is likely to continue to go to Vladivostok for Eastern Russia.

(b) *China*

Communist China is a more consistent importer of Canadian wheat than the U.S.S.R., as shown in Table 11.²⁶ If Canada offers competitively priced wheat exports, prospects could amount to about 90 million bushels and maintain this level on average to 1980. The F.A.O. indicates that there is little information available on China's grain plans but that the most reasonable assumption is that imports will continue on the present scale.

TABLE 11
Exports of Canadian Wheat to Communist Countries, 1960-61 to 1967-68

Year	U.S.S.R.	Mainland China	Eastern Europe	Total
(in millions of bushels)				
1960-61.....	8	35	22	62
1961-62.....	—	72	22	94
1962-63.....	—	56	23	79
1963-64.....	234	41	36	312
1964-65.....	10	62	70	143
1965-66.....	202	74	33	309
1966-67.....	93	91	31	214
1967-68.....	60	52	12	126

SOURCE: Hedlin, Menzies: *The Wheat and Oil Seeds Economy in Canada*. A study for the Task Force.

(c) *Eastern Europe*

Canada's exports of wheat to some eastern European countries have been covered by three-year contracts. Sales to eastern Europe declined from around 30 million bushels in 1966-67 to 11 million bushels in 1967-68, and are not stable.

Total production of wheat in Eastern Europe has grown rapidly in the past decade. Competition is strong from the U.S.S.R., France, and in some years from the United States. Therefore Canadian exports may be only about 10 million bushels by 1980, unless Canada competes more effectively by offering a greater number of classes of wheat.

²⁶ On September 26, 1969, the Canadian Wheat Board announced the sale of 86.2 million bushels of wheat to China over a one-year period. In the agreement, China is to pay 25% cash when each ship is loaded and the balance within 18 months with interest.

(d) *All Other Commercial Export Markets* (including less developed countries but excluding foreign aid)

Canada's total commercial exports of wheat (not flour nor aid exports) to all other commercial markets including less developed countries average only some 20 to 30 million bushels per annum, with South Africa, Cuba and Venezuela the most important outlets. The largest commercial market in this group, Brazil, (imports of 80 to 100 million bushels), has not yet been penetrated by Canada, since sales to this market are primarily by the United States on a subsidized or barter basis. The slow growth in purchasing power, and different consumption habits in most less developed countries plus the emergence of new high-yielding varieties and strong competition from other exporters, would tend to limit Canada's commercial exports to all other commercial export markets at a fairly constant level of some 30 million bushels in future. More research is needed on individual markets, and efforts should be made in particular to penetrate the Brazilian market. With two-fifths of world wheat exports including concessional exports going to L.D.C.'s, a major sales effort with cheaper wheats might pay handsome dividends. Total exports to Asia, Africa and Latin America are shown in Table 12.

(e) *Foreign Aid* (food aid)

Canada provided some 53 million bushels of wheat as food aid in 1966-67, primarily due to crop failure in India and Pakistan. In 1967-68 wheat exports as food aid dropped to some 20 million bushels. However, Canada is committed to providing about 18 million bushels of wheat per annum under the World Food Program for the next few years. This amount, plus Canada's other multilateral and bilateral food aid programs should maintain food aid shipments for some years at 30 to 40 million bushels. Canadian food aid shipments might be about 20 million bushels by 1980—this, after all, can only be an estimate.

(f) *Seed and Feed* (in Canada)

It is possible that high yield wheats might replace the traditional feed grains as sources of feed to a considerable extent, but this is no more than a possibility at present. A significant amount of wheat has been fed in the past, particularly when on-farm stocks become large. The amount seems to have varied from about 40 to 70 million bushels per year.

Summary of Demand for Canadian Wheat

Putting together the data and projections of this section in Table 13, one finds a rather pessimistic outlook for 1980. Acreage requirements in 1980 obviously depend on one's assumptions. Assuming that there will be two different types of wheat grown, and that the yield of Marquis quality wheat

TABLE 12
Exports* of Wheat and Wheat Flour from all Countries to South and Central
America, Asia (other than Japan), and Africa 1963 to 1968

Region and Country	Year				
	1963-64	1964-65	1965-66	1966-67	1967-68
	(000 Metric Tons)				
South and Central America	4,876	5,364	5,913	6,503	6,558
of which:					
Brazil.....	2,077	2,121	2,326	2,728	2,370
Venezuela.....	502	586	568	619	689
Peru.....	453	429	601	631	547
Cuba.....	466	566	624	667	726
Chile.....	130	218	391	440	523
Columbia.....	166	217	245	201	275
Asia (except Japan)	15,968	18,861	20,564	19,378	19,172
of which:					
China (Mainland).....	5,198	5,054	6,372	5,007	4,156
India.....	4,664	6,542	7,612	6,277	6,817
Pakistan.....	1,669	1,892	1,064	2,045	2,175
Korea, South.....	760	525	568	817	955
Philippines.....	538	471	586	566	746
China (Taiwan).....	342	447	434	365	595
Malaysia.....	307	328	354	495	542
Africa	3,805	4,415	4,930	6,984	5,690
of which:					
Egypt.....	1,897	2,014	2,404	2,254	2,326
Algeria.....	402	356	437	1,113	607
Morocco.....	154	496	354	982	853
South Africa.....	184	79	216	834	97

*Including concessional exports or food aid.

SOURCE: International Wheat Council, *World Wheat Statistics 1968, Table 9 and 1969, Table 8d.*

is 25 bushels in 1980,²⁷ then 12 million acres would be required. Assuming a high yielding variety suitable for feed and for lower quality milling markets and with a yield of 32 bushels in 1980, another 8 million acres would be required. Thus, for all purposes—high quality milling, low quality milling, for export and domestic use, and including 80 million bushels for feed—20 million acres in wheat seems to be a reasonable target for 1980.

The prospects for Canadian wheat exports vary tremendously from year to year. Who could have predicted, for example, that exports of Canadian wheat to the U.S.S.R. would have risen from zero in 1962-63 to 234 million bushels in the following year, then fallen to 10 million bushels in the next year, and risen to 202 million bushels in the year after that? The Task Force recognizes that making predictions for a commodity such as wheat is extremely hazardous.

²⁷ Recent yields have averaged about 22 bushels per acre. Some authorities project yields averaging as high as 28 bushels per acre by 1980 (See Economics Branch, Canada Dept. of Agriculture, *Demand-Supply Projection for Canadian Agriculture*, 1980). A somewhat more conservative forecast is used here; See also Shebeski L. and McGinnis R.C. op. cit.

TABLE 13
Present and Future Demand for Canadian Wheat and Flour
All figures in millions of bushels and for Canadian crop years

	1966-67 Actual	1967-68 Est'd	1980 Forecast	1980 Range
A. Marquis Quality				
1. United Kingdom.....	73	69	60	(50 to 80)
2. European Economic Community.....	50	42	40	(35 to 50)
3. Other Western Europe.....	13	9	10	
4. Japan.....	60	40	80	(60 to 90)
5. Flour markets (other than U.K.).....	26	22	10	
6. Canadian human consumption.....	56	57	70	
7. Sub-total.....	278	239	270	
B. Lower Quality Wheat***				
1. U.S.S.R.....	93	75	10	(0 to 100)*
2. China.....	90	50	90	(50 to 120)*
3. Eastern Europe.....	31	11	10	
4. All other commercial.....	26	18	30	
5. Foreign aid.....	53	20	20	
6. Feed wheat (domestic use).....	41	60	80	
7. Sub-total.....	334	234	240	**
C. Seed.....	44	45	35	
Grand Total (A7, B7 and C).....	656	518	545	

SOURCE: Canadian Wheat Board *Annual Reports*, for actual and provisional consumption figures.

*The higher range figures will only be attainable, if at all, by the introduction of higher yielding lower priced wheats, and/or crop failures in importing countries.

**If high yielding feed wheats are introduced, they may compete both domestically and internationally as feed grains for animal feeds. The potential size of such markets is great if feed wheats are competitive with other feed grains, but forecasts are impossible at this time.

***Small discrepancies in data due to differing sources and different crop years.

The extreme variability in Canada's wheat exports and production raises the basic question as to what an optimum inventory or carryover of wheat in any given year should be. During the period 1951-52 to 1961-62, for example, Canada's exports of wheat averaged 257 million bushels (see Table 14). The annual wheat carryover ranged from a low of 214 million to 729 million bushels. The main reason for the variation in the carryover during this period appeared to be the wide fluctuation in wheat yields. If the difference between the highest yield (26.7 bushels per acre) and the lowest yield (10.6 bushels per acre) is applied to the average wheat acreage (23.5 million acres) for the period in question, the difference in Canada's total wheat production would have been approximately 378 million bushels.

The main reason for the variation in Canada's wheat carryover during the period 1962-63 to 1966-67 appeared to be the variability in Canada's wheat

exports. The range in wheat exports varied from a low of 298 million bushels in 1962-63 to a high of 545 million bushels in 1965-66 (See Table 14).

During the entire period 1951-52 to 1966-67, Canada's wheat exports varied from a low of 197 million to a high of 545 million bushels. The range in Canada's annual wheat carryover varied from 214 million to 729 million bushels while the average wheat yield per acre fluctuated from a low of 10.9 to an all-time high in 1966 of 27.7 bushels per acre.

TABLE 14
 Variability in Canada's Wheat Exports, Carryover, Wheat Acreage and Yields
 (Wheat exports do not include flour equivalent)

	Annual Wheat Exports	Annual Wheat Carryover	Annual Yield/ Acre	Average Wheat Acres
	(millions of bu.)			(millions)
1951-52 to 1961-62				
Average.....	256.7	532.9	19.7	23.5
Low year.....	196.7	213.9	10.6	20.9
High year.....	319.7	728.8	26.7	25.5
1962-63 to 1966-67				
Average.....	444.2	487.0	23.7	27.9
Low year.....	298.3	416.5	20.0	26.2
High year.....	544.9	570.7	27.7	29.2
1951-52 to 1966-67				
Average.....	315.3	519.0	20.9	24.9
Low year.....	196.7	213.9	10.6	20.9
High year.....	544.9	728.8	27.7	29.2

It is obvious that extremely severe fluctuations can occur in Canada's wheat carryover when high yields coincide with a period of low exports or conversely, when low wheat yields in Canada coincide with a buoyant export market. One can speculate as to what the situation might have been like had the 10.9 bushels per acre wheat crop in 1961 continued during the period of large export sales to Russia and China. The wheat problem would have been serious, indeed, had the 27.7 bushels per acre wheat crop in 1966 continued during three or four years of depressed export markets for wheat.

There is a need for Canada to develop a "normal granary" concept as an integral part of her wheat marketing policy. The "normal granary" would act as a buffer between the unpredictable variability of wheat exports on one hand and the widely fluctuating wheat yields on the other. Some minimum and maximum limits should be set within which fluctuations in the wheat carryover would be regarded as a normal part of the marketing process. A great deal of research is needed in order to determine what these minimum and maximum limits should be. It should be noted, however, that the "normal granary" should not be allowed to become an "abnormal" granary as surpluses

begin to appear. In other words, there must be a maximum carryover limit beyond which it would be clearly undesirable to hold grain in stock.

If recent developments are any indication of the events which might take place in the coming decade, it is clear that substantial adjustments will have to be made in the wheat industry.

In brief, the implications of this section are:

- (a) current indications are that total acreage in wheat should be no more than 20 million acres by 1980;
- (b) Canada may have to turn to the production of some higher yielding classes of wheats attractive to a wider range of markets if even the output of 20 million acres is to be marketed;
- (c) higher yielding wheats have the potential for achieving increased sales in feed grain markets. Canada must be able to supply high quality wheats of a guaranteed protein content to retain her European and Japanese markets and to serve Canadian consumers, and should have higher yielding wheats in order to retain and capture sales in other competitive markets, to develop feed wheat outlets, and to help improve farmers' incomes.

DEMAND PROSPECTS FOR CANADIAN FEED GRAINS

The world coarse grains economy has experienced some remarkable changes and adjustments during the past 10 to 15 years. Production of coarse grains has expanded very substantially in many countries of the world. There have been marked changes in the utilization of feed grains and a very significant shift in the pattern of international trade. New and changing domestic and international policies have had a very important effect on the competitive relationships of exporters and importers of coarse grains.

1. World Production of Coarse Grains

During the period 1957-68, world production of coarse grains increased from 408 to 526 million tons (Table 15). By far the largest part of this increase came from corn. One-third of the increase in world corn production occurred in the United States (primarily through increases in yield) with the remainder of the production increase occurring in Western Europe and several countries in Asia and Africa. Almost half of the increase in barley production during the period 1955-68 occurred in Europe, particularly West Germany, France and the United Kingdom. The production of millets and sorghum also increased very substantially reaching a high of 84 million tons during the crop year 1967-68. The production of oats and rye actually declined during the past ten years.

2. World Exports of Coarse Grains

World exports of coarse grains increased from 20.6 million to 41.4 million tons during the ten-year period ending in 1967-68 (Table 16). By far the

TABLE 15
Coarse Grains: World Production by Type of Grain¹

	1955-56 average 1957-58	Year				Change 1955/56— 57/58 average to
		1964-65	1965-66	1966-67	1967-68 ²	1967-68
		(millions tons)				%
Production						
Maize.....	160.1	218.4	228.4	239.8	233.9	46
Barley.....	78.3	108.2	104.1	115.0	118.9	52
Millet and sorghum.....	59.8	74.0	78.7	79.2	84.0	40
Oats.....	62.1	44.4	46.5	47.3	50.4	-19
Rye.....	35.5	32.7	34.4	31.0	32.4	-9
Mixed grains.....	6.1	6.1	6.0	6.0	6.3	3
Total.....	407.9	483.8	498.1	518.3	525.9	29

¹ Data includes estimates for Mainland China, North Korea and North Vietnam.

² Preliminary

SOURCE: FAO Commodity Review 1967, page 38; and U.S.D.A. Foreign Agriculture Circular

largest exporter of coarse grains is the United States followed by Argentina, France and South Africa. While the export volume of feed grain doubled during the decade, Canada's exports of feed grains declined by almost one-third.

A significant shift has occurred in the relative position of the major exporters of coarse grains during the past two decades. During the immediate post-war period, the United States handled about one-third of all coarse grains moving into export trade; fifteen years later the United States accounted for over one-half of all coarse grain exports. Since the war, Canada's position among the major exporters of coarse grains dropped from 10.5 to 3.1 per cent of the total volume exported, while France increased her share from 0.2 to 7.6 per cent during the same period of time.

Western Europe (particularly the E.E.C.) was the largest importer of feed grains. During the 1967-68 crop year, the E.E.C. countries imported 16.8 million tons of feed grains out of the 41.2 million tons traded. Japan, the next largest importer of feed grains, purchased 8 million tons in 1967-68. The United Kingdom, once a relatively large importer of coarse grains, accounted for only ten per cent of the world feed grain imports during the crop year 1967-68.

3. Trade Patterns In Coarse Grains

By far the largest proportion of the increase in world exports of feed grains was represented by corn. During the decade ending in 1968, world production of corn increased by 46 per cent, while the export volume of corn increased by approximately 300 per cent during the same period of

TABLE 16

World Trade in Coarse Grains¹, Crop Years 1956-57 to 1960-61 and 1964-65 to 1967-68

	1956-57 to 1960-61	1964-65	1965-66	1966-67	1967-68
	(millions tons)				
<i>Exports</i>					
Argentina.....	2.9	5.2	3.8	6.5	4.3
Australia.....	0.9	0.8	0.5	0.9	0.3
Brazil.....	n.a.	0.0	0.6	0.6	1.4
Canada.....	1.7	1.1	1.2	1.3	1.2
France.....	n.a.	2.9	2.8	3.8	4.1
S. Africa.....	0.7	0.7	0.3	0.7	3.4
United States.....	9.4	17.6	25.5	21.0	19.7
U.S.S.R. ²	n.a.	0.6	0.2	0.2	0.1
Eastern Europe ²	0.3	0.8	0.5	0.6	0.7
Others.....	n.a.	5.0	6.8	7.1	6.2
World ²	20.6	34.7	42.2	42.7	41.4
<i>Imports</i>					
Western Europe.....	n.a.	22.7	29.1	27.7	26.7
—E.E.C.....	8.4	14.0	17.9	16.9	16.8
—U. Kingdom.....	4.1	3.9	4.3	4.1	4.1
Asia ³	n.a.	6.3	7.6	11.7	10.9
—Japan.....	1.5	5.1	5.2	7.8	8.0
Eastern Europe ²	n.a.	1.2	1.8	1.2	0.8
Others.....	n.a.	3.3	2.7	2.1	2.8
World ²	20.4	33.5	41.2	42.7	41.2

¹ Rye, barley, oats, corn, sorghum, millets and other grains² Excluding trade within the centrally planned countries³ Excluding China (Mainland)SOURCE: "A Review of the World Grain Situation", *Canadian Farm Economics*, Economics Branch, Canada Dept. of Agriculture, Vol. 4, No. 3, August, 1969.

time (Table 17). The export trade in sorghum has also increased very substantially during recent years, rising from 1.6 million tons to a high of 9 million tons during the period 1955-67. There has been very little change in the volume of barley exported during the past decade while trade in oats and rye declined significantly.

There has been a marked shift during recent years in the relative importance of each of the coarse grains in the world export market. Twenty years ago, barley and oats together ranked about equally with corn in the world export market. Since that time, corn exports have grown in importance, comprising about two-thirds of the export trade in recent years (Table 17).

At present corn comprises by far the largest proportion of the total feed grains exported from the United States, Argentina, South Africa and

TABLE 17
Coarse Grains: World Exports by Type of Grain¹
Year Beginning

	1955-56 1957-58 average	1964-65	1965-66	1966-67	1967-68 ²	Change 1955-56 to 1967-68
(millions of tons)						
<i>Exports</i>						
Maize.....	6.9	23.0	27.3	25.9	27.7	301
Barley.....	6.8	7.8	7.7	7.1	7.0	3
Sorghum.....	1.6	4.2	7.2	9.0	5.6	250
Oats.....	1.4	1.5	1.6	1.2	1.1	-22
Rye.....	1.0	0.5	0.6	0.5	0.4	-60
Total.....	17.7	37.0	44.0	43.7	41.8	236

¹ Data includes estimates for Mainland China, North Korea and North Vietnam

² Preliminary

SOURCE: F.A.O. *Commodity Review 1967*, p. 38; and U.S.D.A. *Foreign Agriculture Circular*.

Thailand (Table 18). Sorghum is also an important export commodity from the United States and Argentina. Barley, on the other hand, comprises about two-thirds of the total coarse grains exported from France and Canada while barley and oats are about equally important to Australia. While France and Australia are in direct competition with Canada insofar as world barley markets are concerned, the corn and sorghum exports from other countries also offer very effective competition to Canada's barley export trade. (Table 18).

TABLE 18
Percentage of Each Grain Comprising the Coarse Grains Export Package for
the Major Exporters
(average for the 5 year period 1962-63 to 1966-67)

Country	Corn	Barley	Sorghum	Oats	Rye	Total	Total coarse grains exports
	%	%	%	%	%	%	(millions tons)
United States.....	67.9	7.0	22.7	1.3	1.1	100.0	19.11
Argentina.....	73.6	4.4	15.6	5.4	1.0	100.0	4.52
France.....	30.7	66.5	0.9	1.3	0.6	100.0	2.75
South Africa.....	91.8	0.3	7.9	—	—	100.0	1.28
Thailand.....	95.5	—	4.5	—	—	100.0	1.02
Australia.....	0.3	48.2	4.3	47.2	—	100.0	0.70
Canada.....	0.8	64.8	0.6	18.1	15.7	100.0	1.13

SOURCE: Laughland, A. W. *Canada and World Trade in Wheat, Coarse Grains and Oilseeds*, Saskatchewan Wheat Pool, January, 1969.

The relative position of the major importers of coarse grains has changed quite substantially during the past two decades. Italy and Japan, once small importers of coarse grains, have become relatively important in the world trading pattern for coarse grains. On the other hand, the United Kingdom and West Germany have declined in relative importance as markets for coarse grains.

Corn represents by far the most important feed grain purchased by the major importing countries of the world. In fact, corn represented over 80 per cent of the total feed grains imported by Italy and the United Kingdom during the period 1962-63 to 1966-67 (Table 19). Only in the case of West Germany did barley occupy a relatively important position with respect to the imported feed grains. It is significant to note that, while Japan represents an important market for Canadian exports of barley, over 90 per cent of the total feed grains imported by that country during the past five years consisted of corn and sorghum. The same situation prevails in the case of Belgium and Luxembourg. It is clear that any expansion in Canada's barley export trade will have to take place in direct competition with corn and sorghum, two export commodities of primary importance to the United States.

TABLE 19
Percentage of Each Grain Comprising the Coarse Grains Import Package for
the Major Importers
(average for the five year period 1962-63 to 1966-67)

Country	Corn	Barley	Sorghum	Oats	Rye	Total	Total coarse grains imports
	%	%	%	%	%	%	(millions tons)
Italy.....	81.1	15.1	0.4	3.4	—	100.0	5.34
Japan.....	61.3	8.4	29.3	0.2	0.8	100.0	5.12
United Kingdom.....	83.6	6.6	9.0	0.7	0.1	100.0	4.25
West Germany.....	49.3	31.0	6.8	9.5	3.4	100.0	4.01
Netherlands.....	58.2	6.8	23.9	7.1	4.0	100.0	3.06
Belgium-lux.....	48.8	15.8	30.6	3.3	1.5	100.0	1.88

SOURCE: Laughland, A. W. *Canada and World Trade in Wheat, Coarse Grains and Oilseeds*, Saskatchewan Wheat Pool, January 1969.

4. Canada's Export Markets for Coarse Grains

Canada's major markets for coarse grains, particularly barley, include the United States and three countries—the United Kingdom, Japan and Italy—in which imports of corn and sorghum predominate at the present time. The United States market for exports of Canadian feed grains has declined in relative importance during the past 20 years, while the U.K. market has remained relatively stable. Only in the case of Japan and Italy has there been a gain in the market for Canadian feed grains.

Barley is by far the most important coarse grain export from Canada. During the period 1956-61, the average annual export of barley from Canada amounted to about 69 million bushels. Barley exports declined to a low of 15 million bushels in 1962-63, recovered slowly to 58 million bushels in 1966-67 and declined to another low of 21 million bushels in 1968-69 (Table 20). Rye has never represented a large proportion of Canada's coarse grains exports. It appears that Canadian exports of oats are becoming less important, amounting to only two million bushels in 1968-69.

TABLE 20
Exports of Canadian Barley, 1967-68 and 1968-69

Destination	1967-68	1968-69
	(bushels)	
Italy.....	9,567,134	—
Netherlands.....	35,000	—
Britain.....	1,943,024	10,879,269
Ireland.....	—	499,875
Israel.....	2,954,047	1,266,300
Japan.....	15,448,226	771,830
Australia.....	1,304,630	—
U.S. Oceania.....	—	116,200
Columbia.....	459,292	—
United States.....	4,372,116	7,676,923
Total, all countries.....	36,083,469	21,210,397

SOURCE: Coarse Grains Quarterly, August 1969, Dominion Bureau of Statistics, Ottawa.

5. *Future Production and Consumption Trends*

The future possibilities for exports of Canadian coarse grains have to be assessed against the background of world production and consumption trends. During the period 1961-63, the average annual deficit for feed grains in the importing countries of the world amounted to 20.8 million metric tons (Table 21). Most of this deficit occurred in the developed countries, particularly the E.E.C., the U.K., Northern European countries and Japan. The projected feed grains deficit by 1975 is expected to be around 39 million tons under a low growth assumption and around 30 million tons under a high growth assumption. It is expected that the centrally planned countries will continue to be approximately self-sufficient in coarse grains by 1975 and so the growth in imports of feed grains is expected to take place in the developed and developing countries. The largest imports are projected for Japan and the E.E.C. countries. In general, the F.A.O. projections indicate a potential growth in imports of feed grains by 1975 of anywhere from 50 to 100 per cent over that for the period 1961-63.

TABLE 21

Projected Production and Consumption of Coarse Grains in Importing Countries by 1975 and Average for Base Period 1961-63

Region and Country	1975						
	1961-63 average			Low G.D.P.		High G.D.P.	
	Production	Consumption	Trade	Production	Consumption	Production	Consumption
(million metric tons)							
<i>Developed Countries</i>							
United Kingdom.....	7.7	12.1	4.5	13.6	16.3	13.6	16.9
E.E.C.....	29.3	38.8	9.6	41.2	52.9	41.2	55.4
Other North Europe....	12.6	14.8	2.1	15.7	19.0	15.6	19.6
South Europe.....	18.1	19.8	1.7	23.0	27.1	25.0	22.5
Japan.....	1.8	4.6	2.6	1.3	10.5	1.3	11.3
Total.....	69.5	90.1	20.5	94.8	125.8	96.7	125.7
<i>Developing Countries</i>							
Latin America.....	21.2	21.8	0.6	34.0	34.0	35.8	34.5
Africa.....	27.7	27.5	-0.2	37.4	41.2	42.9	42.5
Near East.....	8.3	8.1	-0.2	10.4	10.4	11.3	12.2
Far East.....	31.2	31.5	0.3	38.0	42.7	44.1	44.3
Total.....	88.4	88.9	0.5	119.8	128.3	134.1	133.5
<i>Centrally Planned Countries</i>							
U.S.S.R.....	48.3	45.7	-2.6	67.5	66.4	72.0	69.5
Eastern Europe.....	33.9	35.6	1.7	42.7	42.1	41.1	42.8
China Mainland.....	65.3	66.0	0.7	86.1	87.1	90.8	91.8
Total.....	147.5	147.3	-0.2	196.3	195.6	203.9	204.1
Grand Total.....	305.4	326.3	20.8	410.9	449.7	434.7	463.3

SOURCE: *Agricultural Commodities—Projections for 1975 and 1985*, Vol. 1, F.A.O. Rome, 1967

DEMAND PROSPECTS FOR CANADIAN OILSEED CROPS

1. Production of Oilseed Crops

The world production of oilseed crops has been steadily expanding during the past few years. Since 1960, oilseed production has increased by almost 16 per cent with most of this increase taking place in the edible vegetable oils. The leading oilseed crop is soybeans followed by sunflowerseed and peanuts. Rapeseed is rapidly becoming an important crop in many countries of the world.

Almost 70 per cent of the world soybean production takes place in the United States. The other major producer is Mainland China with about 20

per cent of the world production. Canada's production of soybeans has been increasing very slowly and currently comprises less than one per cent of world production.

India and China produce about one-half of the world's rapeseed output while other important producers include Canada, Poland, France and Pakistan. World flaxseed production has remained fairly constant over the past 20 years while Canada's production has remained steady at about 20 million bushels or 15 to 20 per cent of world production.

Oilseed crops do not occupy much of the farmland in Canada at the present time. Flaxseed production dropped from 2.3 million acres in 1965 to a low of 1 million acres in 1967. By 1969 flaxseed acreage in Canada had climbed to a high of 2.4 million acres.

Soybean production is confined primarily to southwestern Ontario. Soybean acreage increased slowly from 228 thousand acres in 1963 to 295 thousand acres in 1968. During this same period Canada imported substantial quantities of soybeans and soybean cake and meal from the U.S.A. Soybean imports are more than double Canadian production.

Rapeseed production in Canada has increased very rapidly during the past few years. Between 1963 and 1969 rapeseed acreage increased from 478,000 to 2.0 million acres. Domestic crushings of rapeseed have increased each year and reached about 7 million bushels in 1968-69 compared with exports of 14 million bushels.

Rapeseed oil comprises about one-third of vegetable oil now used in Canada. During 1968-69, Canada exported 14.3 million bushels of rapeseed of which 10.9 million went to Japan and 1.8 million to Taiwan. Exports of rapeseed to the E.E.C. countries declined from 4.5 million bushels in 1966-67 to only 391,000 bushels in 1968-69.

Sunflowerseed production in Canada is confined to southern Manitoba. Canadian production of sunflowerseed oil is sold primarily as salad oil in Western Canada. Only a small quantity of sunflowerseed is exported each year, mainly to the United States. Indeed, Canada imported over 40 million pounds of sunflowerseed oil in 1968 mainly from the U.S.S.R. and other Eastern European countries.

Mustard seed production in Canada has increased quite substantially during the past six years. In 1968, 533,000 acres were devoted to mustard seed production. During the 1967-68 crop year, about 2.2 million bushels of mustard seed were exported with over half going to the United States. Japan, the Netherlands and West Germany also imported substantial quantities of mustard seed from Canada.

2. Trade in Oilseed Crops

World exports of the principal vegetable oils and oilseeds are increasing each year. Of the edible vegetable oils and oilseeds entering export trade, soybeans is the most important crop, comprising about 40 per cent of the total. The United States dominates the soybean oil and meal export market,

accounting for 75 to 80 per cent of total world exports. Canada's exports of soybean oil and meal have been generally quite small and, in most years, have been about equal to imports from the United States. Japan and West Germany have accounted for about half of the world imports of soybeans. Pakistan and Spain are the largest importers of soybean oil, while the main importers of soybean meal include Canada, Denmark, France, the U.K. and West Germany.

Rapeseed accounted for about seven per cent of the total edible vegetable oil and oilseed crops exported in 1967. Canada is the major exporter of rapeseed followed by France and Sweden. The main exporters of rapeseed oil are France, Sweden and West Germany. The relatively small amount of rapeseed oil exported from Canada goes to the United States. France, Italy and West Germany account for the main exports of rapeseed meal. The main importers of rapeseed are Italy, Japan and West Germany and in recent years these countries have accounted for about 60 per cent of world imports of rapeseed.

Japan is by far the most important market for Canada's export of rapeseed (Table 22). Between 1957 and 1967 Canadian exports of rapeseed to Japan increased from 739,000 to approximately 8.4 million bushels; by the end of the crop year 1968-69, exports to Japan amounted to nearly 11 million bushels. According to a recent study, there would appear to be even greater opportunities for the use of Canadian rapeseed in Japan.²⁸ It was found that rapeseed meal in Japan was being used almost wholly to fertilize tobacco plants and citrus fruits, with very little research work being carried out to determine the suitability of rapeseed meal for animal feed. The results of the study indicated that Japan could conceivably use about four times (40 million bushels) as much rapeseed as she imported from Canada in 1968. It was indicated, however, that if Canada is to capture this potential market, she must do a much better job of selling the merits of rapeseed to users.

Italy has been the next most important market for Canadian rapeseed, although this market declined very significantly during 1967-68 and 1968-69. Nationalist China, was Canada's second best customer for rapeseed during the 1968-69 crop year. The study carried out for the Rapeseed Association of Canada did indicate, however, that the processors in Taiwan encountered serious problems in the processing of Canadian rapeseed, difficulties which should be recognized by Canada if that market is not to be lost. It was recommended that some persons knowledgeable in the processing field should be sent to Taiwan to help the processors resolve their difficulties.

Canada's prospects for expanded exports of rapeseed to the E.E.C. countries are somewhat uncertain. The protection of the E.E.C. levies, the relatively high domestic price support programs and the use of export subsidies by the E.E.C. exporters to third countries not only encourage greater production within the E.E.C. countries but makes it difficult for countries such as Canada to sell in these markets. If the protein content of rapeseed

²⁸ Report to the Rapeseed Association of Canada by a two-man team which visited Japan in March, 1969.

TABLE 22
Major Importers of Canadian Rapeseed, 1957-58 to 1968-69

Crop Year	Japan	U.K.	Belgium- Luxem- bourg	West Germany	Italy	Nether- lands	All Others	Total
(thousand bushels)								
1957-58	739	62	20	1,110	2,238	2,092	88	6,349
1958-59	976	22	11	459	2,221	1,926	55	5,670
1959-60	2,289	31	8	—	138	10	472	2,948
1960-61	877	169	311	607	2,949	845	2,317	8,075
1961-62	1,231	146	108	226	3,320	988	898	6,917
1962-63	3,080	73	158	215	1,358	372	414	5,670
1963-64	4,331	92	—	6	189	167	636	5,421
1964-65	2,567	357	68	638	1,462	1,036	2,107	8,235
1965-66	6,986	162	335	1,075	2,804	1,470	794	13,626
1966-67	8,404	158	—	68	3,163	960	1,056	13,809
1967-68	10,197	—	—	—	324	307	1,481	12,309
1968-69	10,909	—	—	64	184	143	3,011	14,311

SOURCE: *Grain Trade Yearbook, 1966-67*, Sanford Evans Services Ltd; *Rapeseed Production in Western Canada*, Searle Grain Co. Ltd. April, 1966. *Coarse Grains Quarterly*, Aug. 1969, D.B.S.

could be utilized more widely for human food in protein deficient areas of the world, this could have very significant implications for the rapeseed industry in Canada. Most developing countries do not have sufficient resources to depend on livestock products as a source of protein for humans.

Canada is the leading exporter of flaxseed followed by the United States. The major exporter of linseed oil is Argentina. On world markets, Canadian flaxseed exports have met with increasingly stronger competition from the United States. Flaxseed exports during 1968-69 at 13.4 million bushels, were six per cent more than the 1967-68 level of 12.6 million bushels. Major markets for this oilseed in 1968-69 were: Japan, with imports of 4.9 million bushels; and the Netherlands and Britain with 2.2 million bushels each. In general, there appears to be a gradual shrinking world demand for flaxseed and linseed oil.

3. Domestic Market for Oilseed Crops

In addition to the export markets, there appears to be considerable opportunity for the expansion of rapeseed consumption in the form of edible oils in Canada. During the period 1964-66, the total domestic consumption of edible oils was estimated to be around 448 million pounds (Table 23). Of this total only 260 million pounds or about 58 per cent, were produced from soybeans, rapeseed and sunflower seed grown in Canada. Each year large quantities of edible vegetable oils are imported into Canada. It is estimated that 40 million pounds of sunflowerseed oil were imported into Canada in 1968 most of which came from the U.S.S.R. and Romania. The soybean, corn and cottonseed oil imported into Canada came mostly from the United States and most of the imported peanut oil from Nigeria.

TABLE 23
Canadian Production, Trade and Consumption of Edible Vegetable Oils, Average
1964-66

Vegetable oils	Production	Imports	Exports	Apparent Domestic use
	(thousand pounds)			
Soybean oil.....	197,924	29,598	29,646	197,876
Rapeseed oil.....	56,790	—	132	56,658
Sunflowerseed oil.....	5,929	—	—	5,929
Cottonseed oil.....	—	39,098	—	39,098
Corn oil.....	—	17,251	—	17,251
Peanut oil.....	—	16,816	—	16,816
Coconut oil.....	—	40,670	—	40,670
Palm oil.....	—	19,922	—	19,922
Palm kernel oil.....	—	8,795	—	8,795
Olive oil.....	—	3,269	—	3,269
Cocoa butter.....	—	13,962	—	13,962
Vegetable oils and fats.....	—	17,129	599	16,570
Vegetable cooking oils and pack salad oils.....	—	7,037	—	7,037
Margarine and shortening.....	—	4,384	167	4,217
Total.....	260,643	217,931	30,504	448,070

SOURCE: *Fats and Oils in Canada*, Dept. of Industry, Food Products Branch, December, 1967.

4. Future Prospects

In general, the future prospects for vegetable oil seed crops, particularly rapeseed, appear to be very bright in Canada. Rapeseed exports account for only seven per cent of the total world exports of edible vegetable oil crops and Canada is the leading exporter of rapeseed. It appears that the export demand for rapeseed is very elastic, and that if Canada is prepared to be price competitive, there is a very substantial market for Canada's exports of rapeseed. In addition, of course, market promotion developments will continue to be an important aspect of any expansion in world markets for rapeseed.

The Task Force has been advised that the limited storage available for rapeseed and difficulties involved in the movement and transportation of this crop make it extremely difficult to provide continuity of supply to importers. The Task Force has been advised that the 1.5 million bushels of storage space allocated in Vancouver for rapeseed is completely inadequate.

In addition to the export markets, it appears that considerable opportunities are available in the domestic market for rapeseed oil. It is conceivable that a doubling of consumption could take place by replacing the vegetable oils presently being imported from other countries.

The future prospects for the increasing use of rapeseed meal appear to be bright. In addition to the expanding market for rapeseed meal in countries such as Japan, there are considerable opportunities for the increased use of rapeseed meal as a livestock protein supplement in Canada. Because of certain inherent qualities, there is a restricted use of rapeseed meal for livestock at the present time but improvements in the meal will be forthcoming through plant breeding and better crushing and processing techniques.

On the basis of the evidence available to the Task Force, it is estimated that rapeseed production could be increased to about five million acres within the next decade. Whether this target is attained will depend primarily on the production efficiency and the price competitiveness of the Canadian rapeseed industry.

PRAIRIE LAND USE

Total acreage in all grain production in the Prairie Provinces has increased from 40.5 million acres in the late 1950's to approximately 45.4 million acres in the late 1960's (Table 24). The number of acres of improved land on the Prairies has increased by about one million acres per year since 1946, and the acreage devoted to all crops (including tame hay) and summer-fallow has increased steadily during this period (Table 25). If these past trends were to continue at a somewhat slower pace, the total acreage in all grains in the Prairie Provinces could amount to approximately 51 million acres by 1980; this would represent a five million acre increase over the late 1960's. Whether and to what extent this increase in crop clearing under A.R.D.A., the provision in the Income Tax Act which permits the cost of land development as a deductible expense to farmers, and provincial policies, which encourage the development of new lands for agricultural purposes such as that in the Peace River area.

While there is a certain romance in the extension of the agricultural frontier, the Task Force recommends that a general moratorium be placed on the development of new lands for agricultural purposes by both federal

TABLE 24
Acreages in Grains, Prairie Provinces, 1955-59 to 1967

Province	Average 1955-59	Average 1960-64	1965	1966	1967
(thousand acres)					
Alberta.....	11,902	12,131	12,930	13,611	13,849
Saskatchewan... ..	22,560	22,511	23,625	25,056	24,795
Manitoba.....	6,279	6,234	7,012	7,037	7,125
Prairie Total.....	40,741	40,876	43,567	45,704	45,769

TABLE 25
Land Use in the Prairie Provinces, 1946-66

Year	Improved Lands	All Crops and Summer fallow	Wheat	Summer fallow
		(thousand acres)		
1946.....	65,408	61,858	23,731	20,398
1951.....	71,840	66,494	24,385	21,569
1956.....	75,706	69,238	22,064	24,113
1961.....	80,370	71,803	24,629	27,860
1966.....	85,191	78,643	29,166	25,224

SOURCE: Census data.

and provincial governments. There appears to be little justification for the use of public funds to expand the agricultural land base during the next decade.

In the projected land use estimates which follow, the Task Force assumes that the improved land acreage in the Prairie Provinces for the next decade will remain at approximately the present level, i.e. 85 million acres.

TABLE 26
Land Use and Production of Principal Crops, Canada
and the Prairie Provinces, 1968 and 1969

	1000 acres		Yield per acre		Pro- duction	1000 bushels
	1968	1969	1968	1969	1968	1969
<i>Canada</i>						
Winter Wheat.....	355	360	42.0	40.8	14,910	14,688
Spring Wheat.....	29,068	24,608	21.8	27.2	634,934	670,131
All Wheat.....	29,422	24,968	22.1	27.4	649,844	684,819
Oats for grain.....	7,556	7,855	48.0	48.5	362,516	381,195
Barley.....	8,836	9,535	36.8	39.9	325,373	380,535
All rye.....	679	927	19.2	18.1	13,049	16,785
Mixed grains.....	1,667	1,740	51.4	49.9	85,602	86,771
Corn for grain.....	957	978	84.8	72.3	81,168	70,772
Flaxseed.....	1,524	2,441	12.9	12.8	19,666	31,264
Soybeans.....	295	322	30.6	23.6	9,027	7,599
Rapeseed.....	1,052	2,012	18.4	18.2	19,400	36,700
<i>Prairie Provinces</i>						
Spring Wheat.....	28,860	24,400	21.8	27.3	629,000	665,000
Oats for grain.....	5,340	5,830	46.6	48.9	249,000	285,000
Barley.....	8,330	9,000	36.1	39.7	301,000	357,000
Rye.....	619	859	18.4	17.4	11,400	14,959
Flaxseed.....	1,502	2,420	12.8	12.8	19,300	31,000
Rapeseed.....	1,052	2,012	18.4	18.2	19,400	36,700

SOURCE: Coarse Grains Quarterly, August, 1969. Dominion Bureau of Statistics.

The projected land use for the Prairie Provinces by 1980 is shown in considerable detail in Table 27 and Chapter 10. The land use requirement for spring wheat is based on the assumption that the total domestic and export requirements for wheat will amount to approximately 545 million bushels by 1980. The projected land use requirements for oats and barley were based on the anticipated livestock and other domestic uses for coarse grains together with projected exports of eight million bushels of oats and 100 million bushels of barley by 1980.²⁹ In the case of barley, the Task Force believes that the projected export of 100 million bushels is quite reasonable given the anticipated world exports of feed grains during the next decade.

TABLE 27
Projected Land Use for The Prairie Provinces

	1966	Projected 1980
	(thousands acres)	
Spring Wheat.....	29,780	19,750
Oats.....	6,200	4,800
Barley.....	6,870	9,500
Rye.....	583	700
Mixed Grains.....	670	1,000
Corn.....	19	250
Flaxseed.....	2,029	1,500
Rapeseed.....	1,388	5,500
Tame Hay.....	5,185	8,521
Tame Pasture.....	4,991	7,179
Fodder Corn.....	48	80
Total Crops.....	57,763	58,780
Summer fallow.....	25,224	25,000
Grand Total.....	82,987 ¹	83,780

¹ Note that the difference between this figure and the total improved land acreage, or about 2.2 million acres, is accounted for by other uses not listed in this table.

Detailed calculations of Projected 1980 acreages appear in Chapter 10.

Considerable expansion (5.5 million acres) will have to take place in the acreage devoted to tame hay and pasture to accommodate the projected increase in livestock production by 1980 (see Chapter 10).

It is difficult, of course, to predict with any degree of accuracy what the exact market requirements for rapeseed might be by 1980. The prospects

²⁹ The projected feed requirements for livestock may be noted in Chapter 6 on livestock. It should be noted that the future exports of feeder cattle to the United States are projected to be 500,000 annually. For each 100,000 head of feeder cattle exported, the amount of land utilized for this purpose would amount to approximately 500,000 acres or the equivalent of approximately 20 million bushels of barley.

for rapeseed, however, appear to be bright. In addition to the potential opportunities for greatly increased use of rapeseed oil for domestic purposes, there appears to be considerable opportunity for increased exports of rapeseed to other countries of the world, particularly Japan, Taiwan and to a lesser extent in the E.E.C. countries. In addition to the use of rapeseed oil for human consumption purposes, there are good prospects for considerable expansion in the use of rapeseed meal for livestock feeding. While rapeseed meal is used at present for livestock feeding purposes, certain undesirable qualities currently prevent an even greater use of the meal. However, current and prospective developments in plant breeding work suggest that this limitation will be overcome in the not too distant future. Another limitation in the use of rapeseed meal relates to the variable quality of the meal resulting from the crushing and extraction processes used at the present time. The Task Force has been advised, however, that improvements in the crushing process are taking place and that it will be only a matter of time before a uniform, high quality product is available. Once these limitations have been overcome, rapeseed meal should replace a significant proportion of the imported soybean meal presently being used in Canada for livestock feeding purposes. In addition, if rapeseed can be produced at a competitive cost with soybeans, there should be growing opportunities for the export of rapeseed meal.

A shift to a protein-system of grading for wheat with a market-justified price premium for protein content could have significant implications for land use in the Prairie Provinces. A study by the Board of Grain Commissioners indicates that the highest protein content for wheat appears to be associated with the brown and dark-brown soil zones; the protein content declines as one moves from these soil zones through the brown-black transition and black and grey-black transition soils in the Prairies which are associated with the production of below average protein content in wheat.

A specific land use policy aimed at encouraging the production of high-protein wheat is complicated by the fact that there are considerable inter-year variations in protein content among the various soil types and the additional fact that the amount of fertilizer used has a significant effect on the level of protein content in wheat. In general, however, some rough approximations may be made as to where high-protein wheat should be produced in the Prairies.

NEW MARKETING GUIDELINES FOR WHEAT

Since the Second World War, the Canadian Government and the Wheat Board have had as one of their major objectives the stabilization of world wheat prices. The support of the International Wheat Agreements, the setting of initial prices for wheat and the pricing policies followed by the Board were all aimed at the stabilization of wheat prices. When foreign competitors engaged periodically in price cutting, Canada generally refused

to follow suit. The best example of Canada's position on world wheat pricing occurred in 1967-68 when the United States declared that in the absence of a formally accepted international agreement on wheat prices, it would consider 1967-68 as a "free year" in regard to export pricing. The Wheat Board refused to make any serious reductions in wheat prices even when it was evident that some sales would be lost, the argument being that retaliatory price cuts would jeopardize the coming into force of the International Grains Arrangement.

While the Wheat Board has contributed greatly to the stabilization of world wheat prices, events during recent years have raised serious questions about the benefits of the approach followed by the Board. The mounting wheat surplus in Canada is a heavy cost to bear for price stability. There are growing doubts about the value of international agreements as a mechanism for ensuring price stability. One author made the following observation:⁸⁰

Stability in the world wheat market has resulted more from the consistency of domestic and international goals of the major participants in the market than from the existence of the I.W.A. In fact it may be argued that the I.W.A. continues to exist because it is consistent with the goals of the major participants. Should this consistency cease to exist, new patterns of price behavior would result simply because domestic agricultural policy goals are dominant in most of the nations involved in the International Wheat Agreement.

The actions followed by the U.S. in 1967-68 and France and Australia during 1968-69 made it clear that Canada's main competitors support international wheat price stabilization only as long as it is in their interests to do so. At the same time, major importers of Canadian wheat, such as Britain and Japan, have demonstrated during recent years that they will import from those countries offering wheat on a competitive price and quality basis.

The Task Force does not recommend the scrapping of the International Grains Arrangement or deny that some form of international wheat agreement may be needed but it does contend that Canada should not make unilateral sacrifices to maintain price stability for wheat. The wheat price war during 1969 indicates that an international wheat agreement must have the mutual support of all participants concerned if it is to be meaningful.

Much of the difficulty associated with the International Grains Arrangement appears to be associated with the unrealistically high minimum prices which have been set. Given the present surpluses of wheat in the major exporting countries, the Task Force recommends that Canada should take the initiative in negotiating for a more realistic set of minimum and maximum prices under the International Grains Arrangement. History has shown that international wheat agreements appear to work well as long as the market price operates somewhere between the minimum and maximum price levels set. Within this range the specific price is settled by the normal factors of

⁸⁰ McCalla, A. F. "A Duopoly Model of World Wheat Pricing," *Journal of Farm Economics*, Vol. 48, No. 3, Part I, August, 1966, pages 711 ff.

demand and supply. If, however, prices rest on the minimum level under the agreement, exporters are sorely tempted to steal a march on their competitors by using various techniques to shave their prices. The inevitable result, particularly where exporters are burdened with surpluses, must be a breakdown in the international agreement. Because there are no practical or meaningful sanctions behind the International Grains Arrangement which can be exercised in the case of countries which violate the Arrangement, it is difficult, if not impossible, to maintain a minimum price level which appears to be well above the prevailing competitive price for wheat.

Given that it is appropriate strategy for the Wheat Board to maintain wheat prices and not engage in cut-throat competition with the U.S. and other competitors as long as the I.G.A. remains effective, there still remain questions as to whether the Wheat Board should not discriminate more freely between markets and offer a more flexible pricing mechanism to facilitate and encourage sales of Canadian wheat by the wheat exporting firms operating on behalf of the Wheat Board.

It has been suggested that the Wheat Board's practice of announcing selling prices for wheat is disadvantageous to Canada in two ways. First, it gives foreign competitors an opportunity to negotiate sales contracts which just shade these prices. Second, the limited price flexibility allowed to the wheat trading firms gives them less opportunity to negotiate and satisfy buyers that they are obtaining a good deal, and also reduces the trading margin and thus the incentive of these firms to sell Canadian rather than United States or other wheat, which they also handle.

Price flexibility appears to be important. The Wheat Board should give consideration to abandoning its public announcement of fixed prices for all price takers, and instead price flexibly and selectively with different buyers (domestic or foreign). Furthermore the Wheat Board should allow the traders sufficiently attractive margins so that they have some latitude for negotiation with various customers.

The Task Force recommends that the current wheat surplus be reduced to manageable proportions through the Transition Policy described below. Thereafter the pricing strategy of the Wheat Board during any given year must be dictated by the prevailing world demand and supply conditions. The "initial price" for wheat must be low enough to permit price flexibility throughout the crop year. The basis of wheat delivery quotas should become wheat acreage rather than "specified acreage". Never again must the Canadian Wheat Board adopt policies which result in the creation of a surplus as large as that which accumulated in 1969.

NEW MARKETING GUIDELINES FOR COARSE GRAINS

There is a general and growing dissatisfaction with the present methods of marketing and pricing feed grains in Canada. Many recommendations have been made for changes in the coarse grains marketing system. Some groups

have recommended an even stronger control over the marketing of coarse grains by the Canadian Wheat Board. For example, it has been advocated that Prairie producers should be prevented from delivering non-quota wheat, groups have recommended a complete return to the open market method of selling coarse grains. Still others have recommended the creation of a Coarse Grains Marketing Board completely separate from the operations of the Wheat Board.

In general, the problems associated with the marketing and pricing of Canadian feed grains may be summarized as follows:

1. A declining share of the expanding world markets for feed grains.
2. Importation of American feed corn during times of surplus feed grain supplies in Canada.
3. A perennial debate over the merits of the Feed Freight Assistance program which costs approximately \$20 million annually.
4. Distress prices associated with inter-farm sales of feed grains within each of the Prairie Provinces.
5. A futures market for feed grains which may have operated in such a manner in recent years as to lead to the creation of "artificial shortages" in Eastern Canada.
6. A marketing system which favours wheat and tends to discriminate against coarse grains.
7. A marketing system which does not permit efficient producers to compete in the feed grain export markets of the world.

The proposals which follow relate to longer-run changes in the marketing system for barley and oats. Before these changes can be implemented, however, a Transition Policy, discussed in a later section of this Report, will be necessary to eliminate the burdensome surpluses which prevent any constructive changes in the marketing system.

We now turn our attention to the longer-run changes needed in the marketing and pricing of feed grains. Under the proposed modification of the present market system, the Canadian Wheat Board would continue to be the only authorized commercial channel for the purchase of oats and barley from the primary producer. The Task Force proposes that all coarse grains produced and offered for sale to the Canadian Wheat Board by farmers within a given crop year must be cleared from the market during the same crop year with the exception of a normal operating carryover which should be clearly defined. The Task Force recommends that the Canadian Wheat Board should announce in October of each year the quantity of oats and the quantity of barley which are to be carried over by the Canadian Wheat Board at the end of that crop year (i.e. the following July 31). In any given year the actual carryovers could be less than those announced by the C.W.B.

in October if further sales not originally anticipated could be made, but the carryovers should not exceed those announced in October. Grain delivery quotas for coarse grains, if established at all, should be used only to regulate the flow of available coarse grain to the market within the crop year and by May of each crop year grain delivery quotas should be completely lifted for oats and barley. It is also recommended that all purchases of coarse grains from farmers by the Canadian Wheat Board be hedged immediately in the futures market, and if it is not practical to hedge each individual purchase, it is proposed that a system be developed by the Canadian Wheat Board whereby a certain (but not necessarily constant) quantity of coarse grains would be hedged daily. The primary purpose of the hedging would be to develop a futures market which would reflect the genuine free play of demand and supply forces in the market place.

The Task Force recommends that the practice of setting "initial prices" for coarse grains at the beginning of each crop year be discontinued. It is proposed that the price ultimately received by the individual farmer for any given delivery be a monthly pooled price for his particular grade of grain. At the time of a given delivery of grain, the farmer would receive a first payment calculated to be approximately 75 per cent of the estimated final pooled price for that month; he would also be issued a participation certificate which would entitle him to receive the remainder of his payment once the actual pooled price was determined for the month in question.

When an annual pooled price is used, delivery quotas are necessary to ensure a more uniform flow of grain to the market throughout the crop year, i.e. there is no incentive for the producer to delay delivery of his grain if he receives the same price regardless of when he delivers within the crop year. Under an open market, the futures price should normally reflect a cumulative seasonal carrying charge. That is, a farmer delivering later in the crop year should receive a higher price (to the extent of the carrying charge) than his neighbour who delivers his grain earlier in the crop year. A monthly pooled price would help to regulate the flow of grain to the market throughout the crop year without relying so heavily as in the past on delivery quotas.

The primary objective of the new marketing guidelines for coarse grains would be to shift the Wheat Board from a surplus management role to a highly aggressive marketing function. The proposed system would leave the Wheat Board and the private trade free to price competitively in the domestic and export markets of the world. It would permit farmers to market at any time during a given crop year any coarse grains that they wished to deliver (consistent with quotas provided up to May each year). In general, the proposed system of marketing should be designed to remove the shackles which tend to inhibit a healthy and vigorous growth of the coarse grains industry in Canada.

Under the proposed marketing system, there will be times when the prices which the farmer receives may not be as high as he would like to see, but the main criterion of success will be whether he received the best possible prices for all the feed grain that he wished to sell. The Task Force believes this to be more desirable than the case where high prices set by the Wheat Board lead to limited sales of quota and distress prices for non-quota sales of feed grains in the Prairies. After 20 years of experience, it has become clear that the competitive forces (i.e. pricing, promotion, providing desired quality, etc.) of the international and domestic market cannot be ignored if lost markets and burdensome surpluses are to be avoided. If the competitive prices of the market place are thought to be "unjust" or "unfair", or too low at times to yield the producer a reasonable level of income, other policies should be developed apart from the marketing system to deal with the problem. This issue is dealt with in the next section of the Report.

The Task Force believes that a more competitive marketing system for feed grains would eliminate many of the problems and difficulties which have plagued the industry during recent years. It would provide Canada with the opportunity to regain some of the world markets for her feed grains. It would make it much more difficult for American corn to be imported into Eastern Canada and, at the same time, it would give Eastern livestock producers competitive access to Prairie feed grains. The benefits of these proposals for coarse grain marketing would be extended to livestock production and permit more efficient location of livestock feeding. A more competitive marketing system would permit efficient grain producers to compete in the feed grain markets of the world. Under the proposed marketing system for barley and oats, there would be a common market price for sellers and buyers, not a series of different prices such as those which prevail at the present time within the Prairies, in the export markets and in Eastern Canada.

Prairie grain producers have demonstrated that they have the capacity to produce feed grains competitively if the markets are available. The Task Force believes that markets are available if the Canadian marketing system is geared to the competitive realities of the world market place. Canada did not share in the 21 million ton increase in world feed grain exports between 1958 and 1968. However, every effort must be made to provide the Canadian feed grain producer with the opportunity to share in the large world export trade in feed grains. The Task Force projects Canadian exports of 100 million bushels of barley, a reasonable and practical target.

PRAIRIE GRAIN PRICE STABILIZATION PROGRAM

Various policies have been developed in the attempt to stabilize the price and income position of the Prairie farmer. The introduction of the Prairie Farm Rehabilitation Act and the Prairie Farm Assistance Act in the 1930's,

and the enactment of the Federal Crop Insurance legislation in 1958 were designed to protect the farmer against unpredictable variations in crop production. The crop insurance program, in particular, provides the farmer with an effective means of countering the effects of crop yield instability.

Other policies have been designed to stabilize the price and income position of the Prairie farmer. The setting of initial prices by the Federal Government at the beginning of each crop year provided Prairie grain farmers with a minimum price for those quantities of their wheat, oats and barley which they were able to deliver to the Wheat Board in any given crop year. The Temporary Wheat Reserves Act and the Prairie Grain Advance Payments Act were designed to provide farmers with greater stability of price and cash income. Other *ad hoc* policies have been used, such as the acreage payments to Prairie producers during the early part of the 1960's. More recently, Prairie grain producers have been guaranteed a minimum price (i.e. \$1.95½ per bushel for No. 1 Northern wheat basis Fort William) for wheat consumed in the domestic market.

None of these policies has been entirely satisfactory. Perhaps the most serious criticism that can be made of many of them has been the lack of a clear-cut philosophy as to what the various policies were supposed to accomplish, either individually or collectively. In addition, several of these policies have created difficulties in grain marketing because of mixing of marketing and general income objectives.

The Task Force believes that the marketing of the grain must be separated from the general income issues of Prairie agriculture if a highly competitive system of grain marketing is to be developed. There can be no doubt that such a system must be developed. At the same time some form of price and income protection against serious declines in grain prices is fully warranted, because the Task Force recognizes that the introduction of a more competitive pricing system will inevitably introduce greater price fluctuations than has been the case in the past with grain delivered to the Canadian Wheat Board. The discussion which follows outlines a proposal for the development of a *Prairie Grain Price Stabilization Program*.³¹ Under the Program, the Prairie grain producer would be provided with a price floor for a certain portion of his crop.

The Program specifies that prescribed local delivery point minimum prices be established for wheat, oats and barley at levels equivalent to 80 per cent of the annual average of the final Canadian Wheat Board prices received at these local delivery points by farmers for the preceding ten-year period.³²

The Task Force recommends that the prescribed minimum price apply to a "designated yield" from only one-half of the farmer's "base acreage" for

³¹ The Program should apply to the designated area defined by the Canadian Wheat Board.

³² The "prescribed minimum price" level for wheat, oats and barley corresponds to the minimum price support level for specified commodities under the Agricultural Stabilization Act. It should be noted that wheat, barley and oats grown in the Prairie Provinces are not eligible for support under the Agricultural Stabilization Act.

each of wheat, oats and barley.³³ If, in any given year, the prices fall below the prescribed minimum price level (i.e. 80 per cent of the preceding ten-year average) a producer would be paid directly an amount equivalent to the difference between the prescribed minimum price and the actual market price times the "designated yield" applied to his "eligible acreage" (i.e. one-half of his "base acreage").

An example illustrating the application of the Prairie Grain Price Stabilization Program is shown in Table 28. In the example used, the farmer has a base acreage (average for the preceding three years) of 300 acres in wheat, 75 acres in oats and 150 acres in barley. His "eligible acreage" would be one-half of these amounts. The "designated yields" to be applied to the eligible acreage (one-half of the base acreage) are based on the long-term yields applicable to the farmer's area and soil type as described above. The prescribed price supports are derived by taking 80 per cent of the average Wheat Board prices for the previous ten years at his delivery point. In the example shown in Table 28, the farmer would have received a total payment of \$1,020.

In effect, the farmer received a support price of \$1.46 per bushel for one-half (3,000 bushels) of his total calculated wheat crop, while the remainder of the wheat crop sold for \$1.30 per bushel. The same reasoning applies to his barley. In the case of oats, however, the farmer received no payment because the actual market price for oats of 72 cents per bushel exceeded the prescribed support price of 68 cents per bushel.

It is to be emphasized that the farmer would be eligible for payments under the Program even though he did not produce a crop during the current year; the payments are based on the preceding three-year average. If, for example, the producer shown in Table 28 did not plant wheat in 1970, he would still be eligible for payments in 1970 under the Program on the basis of his average wheat acreage for the preceding three years (i.e. the average wheat acreage for the period 1967-69 was 300 acres).

The financial support for the Program would be based on a \$100 million revolving fund, to be administered under the Federal Agricultural Stabilization Act. A maximum of \$100 million would be available from the fund in any given year regardless of how low the prices of grain might drop. In

³³ The "designated yield" is defined as the long-term average yield applicable to a given farmer or his soil type as used by the crop insurance agency in his province. For those farmers not insured under the crop insurance program, the long-term average yields which would apply in calculating coverages (if such farmers were to insure), would be used in determining the "designated yield". The farmer's "base acreage" for each of wheat, oats and barley is defined as the average acreage for the preceding three-year period for each of these crops. For example, if the farmer's wheat acreages in 1967, 1968 and 1969 were 400, 300 and 200 acres respectively, his "base acreage" for 1970 would be 300 acres. The farmer would have a "base acreage" of 300 acres for wheat in 1970 even if he did not plant wheat in that year. If the farmer planted no wheat in 1970, his "base acreage" for wheat in 1971 would be

the average of the preceding three years $\left(\frac{300 + 200 + 0}{3} \right) = 167$ acres. The farmers' "eligible acreage" is defined as one-half of his base acreage.

other words, the fund could not be overdrawn. In the event that prices dropped so low that the fund would be overdrawn, a highly unlikely possibility, the \$100 million would have to be pro-rated accordingly.

TABLE 28

An Example Illustrating the Application of the Agricultural Price Stabilization Program to an Individual Farmer

1. <i>Base acreage ave. 1967-69</i>			
Wheat.....	300 acres		
Oats.....	75 acres		
Barley.....	150 acres		
2. <i>Guaranteed support price: 80% of average of previous ten year prices</i>			
Wheat No. 1 Northern Fort William.....	\$1.46/bus		
Oats.....	\$0.68/bus		
Barley.....	\$1.01/bus		
3. <i>Actual prices received—basis Fort William</i>			
No. 3 Northern Wheat.....	\$1.30/bus		
2 C.W. Oats.....	\$0.72/bus		
3 C.W. (6 row) Barley.....	\$0.81/bus		
4. <i>Acreage eligible for price support</i>			
Wheat $\frac{1}{2}$ of base acreage.....	150 acres		
Oats $\frac{1}{2}$ of base acreage.....	38 acres		
Barley $\frac{1}{2}$ of base acreage.....	75 acres		
5. <i>Designated yield to be applied to eligible acreage (based on yields established under Crop Insurance Program for farmer's area)</i>			
Wheat.....	20 bus/acre		
Oats.....	42 bus/acre		
Barley.....	36 bus/acre		
6. <i>Payment to farmer</i>			
Wheat (150 acres \times 20 bus. = 3,000 bus).....	3,000 bus \times 16 cents =	\$480	
Oats (38 acres \times 42 bus. = 1,596 bus).....	1,596 bus \times 0 cents =	\$ 0	
Barley (75 acres \times 36 bus. = 2,700 bus).....	2,700 bus \times 20 cents =	\$540	
Total Payment.....			\$1,020

The fund would be financed by the Federal Government and those Prairie grain producers who choose to participate in the Program. Prairie grain producers would contribute to the fund through a levy which would become operative when the prices for wheat or oats or barley exceeded 110 per cent of the annual average of the Canadian Wheat Board prices for representative grades for the preceding ten-year period, basis Fort William.³⁴ If, for example, grain prices had risen above 110 per cent (e.g. to 120 per cent) of the average prices, the farmer used as an example in Table 28 would have contributed about \$245 to the fund.

³⁴ We have proposed that the criterion for contribution should be Fort William prices in order to provide equitable treatment among all producers in the designated Prairie area.

Aggregate payments by grain producers to the fund in any year would be matched by an equal contribution to the fund by the Federal Government. Prairie grain producers and the Federal Government would continue contributing to the fund (whenever prices exceeded 110 per cent of the ten-year average prices) up to a maximum of \$100 million. In any year in which payments from the fund exceed the accumulated monies in the fund the difference would be met by the Federal Government. Total payments in any year should not exceed \$100 million. If, for example, the producers' and the Federal Government's accumulated contribution to the fund amounted to \$65 million in a given year, and if during that same year grain prices dropped such that payments from the fund amounted to \$80 million, the deficit of \$15 million would be covered by the Federal Government.

The levy of one per cent should be applied on the value of the "designated yield" (defined above) times the farmer's base acreage for wheat and oats and barley—the base acreages being the average of the acreages for these crops for the three preceding years.

The Program should be *voluntary*. Farmers not wishing to participate in the Program would opt out from paying the levy and would, accordingly, not be eligible for payments from the fund if prices for wheat, or oats or barley dropped below the prescribed minimum support level. In years in which such farmers opted out of the Program, their acreages for those years would be designated as zero for purposes of calculating their base acreage if they were to return to the Program in subsequent years. Their base acreage would be reduced to the extent that the zero acreage would be used in calculating the preceding three-year average acreage.

A further refinement must be applied to the proposal outlined above. In order to encourage a suitable balance among the quantities of wheat, barley and oats produced, it is recommended that the \$100 million revolving fund be allocated in such a way as to provide a maximum of \$55 million for wheat, \$30 million for barley and \$15 million for oats in any one year. These proportions correspond approximately to the projected acreages for wheat, barley and oats in the Prairie Provinces by 1980.

In effect, there would be separate accounts in the fund for each of wheat, oats and barley. For example, the aggregate payment to wheat producers could not exceed \$55 million in any given year. On the other hand, wheat producers and the Federal Government would continue contributions to the fund through the levy (whenever prices exceeded 110 per cent of the previous ten-year average prices) up to a maximum of \$55 million. The same reasoning applies to oats and barley.

It should be emphasized that nothing would be paid to grain producers under the Program for wheat or oats or barley in years when the actual market prices for any of these crops exceeded the prescribed minimum prices.

The Task Force emphasizes that the minimum prices established for wheat, oats and barley should be restricted to the "designated yield" applied to one-half of the individual farm base acreage in wheat, barley and oats

production. Many price support programs have failed because farmers have become insulated from the realities of the market place. By confining the proposed minimum price support to one-half of the base acreage, the "market price" for the remainder of the crop would indicate to the individual farmer which crops to produce and how much of each. The Task Force believes that the market price is a better allocator of resources in farm production than any arbitrary rules and production controls which can be devised.

If the Prairie Grain Price Stabilization Program, a form of price insurance, is taken together with the Federal-Provincial crop insurance program, a form of yield protection, Prairie grain farmers would in effect have a *minimum income guarantee*. More specifically, the individual farmer would have available to him a systematic form of protection against sharp and unpredictable drops in yields and prices. While the individual farmer would have a minimum income guarantee, he would still be free and have sufficient incentive to produce and to sell his crops at the best possible prices in the open market.

The Task Force recommends that the Prairie Grain Price Stabilization Program should be implemented just as soon as the current grain surpluses have been reduced to manageable proportions under the Transition Policy described in detail in the following section. This step should be accompanied by the changes recommended above for the development of a more competitive grain marketing system.

The Prairie Grain Price Stabilization Program will make a much more effective and positive contribution to income stability for Prairie agriculture than do existing programs such as the Temporary Wheat Reserves Act and the Prairie Grain Advance Payments Act. In the proposed Program the Federal Government will share directly with producers in achieving greater income stability for the Prairie economy. The Task Force recommends the discontinuance of the Temporary Wheat Reserves Act, The Prairie Farm Assistance Act, and the cash Advance Payments Act under the Transition Policy described below, and recommends that at the end of the Transition Policy they be replaced by the Prairie Grain Price Stabilization Program.

A TRANSITION POLICY FOR THE PRAIRIE GRAIN INDUSTRY

The current grain surplus problems hang like an ominous cloud over the Prairie Provinces. If Canada's wheat inventory were to be reduced to an average carryover by the end of the 1969-70 crop year, almost one billion bushels of wheat would have to be exported this year, an obvious impossibility. In addition to the large stocks of wheat, Canada also has a large supply of feed grains on hand.

Grain surpluses and an acute shortage of cash among Prairie grain farmers will continue for some time unless drastic steps are taken to alleviate the problems.

It is necessary and desirable that a Transition policy be developed for the Prairie grain industry if the current problems are not to be accentuated and if severe disruptions are not to occur in the livestock and oilseed economy.

The immediate objectives of a Transition Policy for Western Canadian agriculture should be:

1. A reduction in the excess carryover of wheat and coarse grains.
2. The provision of financial assistance to Prairie farmers consistent with necessary and desirable adjustments in the agricultural industry.

Any transition policy designed to deal with these two immediate problems should be compatible with the development of the longer-run agricultural policy embracing the Prairie Grain Price Stabilization Program described earlier in this chapter.

The alternatives to choose from, in dealing with the current grain surplus problem, are few and mostly unproductive. Continuation of present policies is indefensible. Payments under the Temporary Wheat Reserves Act will exceed \$60 million during the 1969-70 crop year and will do nothing to reduce the current grain supplies. Funds extended under the Prairie Grain Advance Payments Act, while welcome to hard pressed grain producers, represent temporary assistance only, make no contribution towards the solution of the grain surplus problem and could cost the Federal Government approximately \$14 million in the form of interest free cash advances during the 1969-70 crop year. Government liability on 1968-69 wheat stocks for which farmers received an initial payment of \$1.70 per bushel (No. 1 Northern basis Ft. William) and which are being sold during the 1969-70 crop year for prices less than the initial payment to farmers, will amount to approximately \$4.5 million for every cent that selling prices average below the initial payment. Other costs include the farmers' expense of storing grain on the farm, losses incurred by farmers on the distress prices associated with non-quota sales of grain, interest on debts and the loss of income by all businesses in the Prairie economy as a result of stagnation in the grain industry.

Straight cash grants such as the acreage payments program during the early 1960's, while providing farmers with temporary financial relief, are *ad hoc* in nature and contribute nothing towards the solution of the grain surplus problem. Food give-away and surplus disposal programs are not a practical solution for the immediate problems of the grain industry even though hunger and malnutrition prevail in many parts of the world. To depend on drought and misfortune in other countries as the means of reducing Canada's grain surplus is not a positive or a reliable foundation on which to build a grain policy.

As a Transition Policy, the Task Force recommends that a system of voluntary *acreage diversion payments* and an *amended quota policy* be established commencing in the spring of 1970.³⁵ Under the proposed acreage diversion program, farmers would be paid a specified sum per acre to divert wheat and barley acreage to forage.

³⁵ Although the Task Force regards this as the desirable timing, it recognizes that there may be administrative and technical difficulties in achieving this schedule.

Wheat

Three of the options relating to the use of wheat acreage diversion payments may be seen in Table 29. In making the calculations shown in Table 29, the following assumptions were used:

1. that an acreage diversion payment of \$7 per acre during the first year would be sufficient to induce farmers to divert a portion of their wheat acreage to forage; that a further payment of \$5 per acre would be paid on the diverted acreage for the second and subsequent years providing it remained in forage.
2. that annual exports of wheat would be 360 million bushels.
3. that domestic use of wheat would amount to 160 million bushels annually.
4. that the wheat yield would be approximately 23 bushels per acre.
5. that the funds would be available to support the acreage diversion program.

Hard spring wheat acreage on the Prairies in 1968 was 28.9 million acres, and in 1969 was 24.4 million (average 26.6 million acres). Case 1, Table 29, indicates that if \$60 million were made available during the first year to support the acreage diversion program, the average 1968-69³⁶ wheat acreage (26.6 million acres) would be reduced by approximately 8.6 million acres; about 18 million acres would remain in production in 1970. Given the above assumptions and a wheat acreage held at approximately 18 million acres, it would require four years before the year-end carryover could be reduced to 576 million bushels. The total cost of the program for the four years would amount to approximately \$60 million for the first year and \$43 million for each of the three subsequent years, or a total of \$189 million.

In Case 2, Table 29, and given the same assumptions but raising the acreage diversion payment to \$81 million for the first year, wheat acreage would be reduced to approximately 15 million acres, and it would require three years before the year-end carryover of wheat could be reduced to 481 million bushels. The total cost for the three years would amount to \$197 million.

Case 3, Table 29, indicates that if the funds were increased to \$102 million for the initial year, wheat acreage would be reduced to approximately 12 million acres and it would require two years to reduce the year-end carryover to 508 million bushels. The total cost for the two years would amount to \$175 million.

The projected year-end carryover would vary up or down, of course, depending on the yield per acre and the quantity of wheat exported in any given year. For example, to the extent that the annual wheat yield per acre

³⁶ The average acreage of 1968 and 1969 is used as a base in order to provide more equitable treatment of producers. If only 1969 acreage were used, it would not reflect the fact that some producers reduced their wheat acreage more than others between 1968 and 1969.

TABLE 29

Possibilities Relating to the Use of Wheat Acreage Diversion Payments

	Crop Year 1969-70	Crop Year 1970-71	Crop Year 1971-72	Crop Year 1972-73	Crop Year 1973-74
<i>Case 1 (Gross cost during initial year = \$60 million)</i>					
Carryover (beginning crop year).....	849,821	1,000,000	894,000	788,000	682,000
Production.....	684,000	414,000	414,000	414,000	414,000
Total Supply.....	1,533,821	1,414,000	1,308,000	1,202,000	1,096,000
Domestic use.....	(160,000)	(160,000)	(160,000)	(160,000)	(160,000)
Exports.....	(360,000)	(360,000)	(360,000)	(360,000)	(360,000)
Year end carryover.....	1,000,000	894,000	788,000	682,000	576,000
<i>Case 2 (Gross cost during initial year = \$81 million)</i>					
Carryover (beginning crop year).....	849,821	1,000,000	827,000	654,000	
Production.....	684,000	347,000	347,000	347,000	
Total Supply.....	1,533,821	1,347,000	1,174,000	1,001,000	
Domestic use.....	(160,000)	(160,000)	(160,000)	(160,000)	
Exports.....	(360,000)	(360,000)	(360,000)	(360,000)	
Year end carryover.....	1,000,000	827,000	654,000	481,000	
<i>Case 3 (Gross cost during initial year = \$102 million)</i>					
Carryover (beginning crop year).....	849,821	1,000,000	754,000		
Production.....	684,000	274,000	274,000		
Total Supply.....	1,533,821	1,274,000	1,028,000		
Domestic use.....	(160,000)	(160,000)	(160,000)		
Exports.....	(360,000)	(360,000)	(360,000)		
Year end carryover.....	1,000,000	754,000	508,000		

SOURCE: Derived by the Task Force.

exceeded 23 bushels, or annual wheat exports fell below 360 million bushels, the year-end carryover would increase accordingly.

Given the urgency of the problem, the Task Force recommends that the Federal Government *provide \$81 million for 1970, and \$58 million for each of the two following years, in support of a wheat acreage diversion program.* This would mean that wheat acreage would be held at approximately 15 million acres until the spring of 1973 at which time the acreage diversion program would be discontinued.

The cost of the wheat acreage diversion program should be covered by the discontinuance of the Temporary Wheat Reserves Act (over \$60 million in 1969-70) and the Prairie Grain Advance Payments Act (which could cost approximately \$14 million in 1969-70) and the Prairie Farm Assistance Act (average subsidy of about \$6 million per year). The net cost of the wheat acreage diversion program to the Federal Government would be minimal.

Producers should be given the opportunity to apply for the maximum allowable diverted acreage under the Transition Policy up to March 31, 1970.³⁷ Initially, the maximum amount of wheat acreage that any one producer can divert for payment under the program should be 44 per cent of his average 1968-69 wheat acreage. If, by March 31, 1970, insufficient acreage has been diverted under the program (i.e. the wheat acreage had not been reduced to 15 million acres), farmers so inclined should be permitted to reapply for a diversion of their entire wheat acreage to the program in 1970.

While participation in the wheat acreage diversion program would be voluntary, an essential feature of the program must be to establish wheat delivery quota acreage on each farm equal to 56 per cent of its average 1968-69 wheat acreage. The amount deliverable under this quota acreage would be set by the Wheat Board and should be equal for each acre of the quota acreage by the end of the crop year. During the course of the year, however, the Wheat Board could vary the amount delivered per quota acre among delivery points, as it does now, in order to obtain the grades desired from particular locations, but by July 31 it should have accepted the same number of bushels per wheat quota acre in the entire C.W.B. designated area.

This feature of the Transition Policy is essential to ensure that acreage is diverted from wheat, to discourage producers from attempting to circumvent the acreage diversion program by increasing yields (as has occurred in the United States) and to provide equitable treatment of all producers during the Transition Policy period. It has the disadvantage that it makes no distinction among farms with different wheat yields, and it may, perhaps, result in the delivery of grades of wheat which are in less demand than the C.W.B. would desire. Nevertheless, the Task Force is of the view that, given the present crisis situation, these disadvantages of the proposal are greatly outweighed by its advantages during the projected three-year life of the Transition Policy.

³⁷ See Footnote 34.

An example of the operation of the wheat delivery quota acreage is given in Table 30. Producer A and Producer B have been operating almost identically in 1968-69 in regard to wheat acreage and production. Both receive the same quota acreage, but A adheres to his and B does not elect to participate in the program, and, in fact increases his yield. The result is that both can deliver the same number of bushels, but Producer B finds that he has no outlet for his excess production, and he receives no acreage diversion payment.

TABLE 30
Example of Operation of Transition Policy for Wheat

	Producer A	Producer B
1. Wheat acreage 1968.....	600	600
2. Wheat acreage 1969.....	400	400
3. Average wheat acreage 1968-69.....	500	500
4. Bushels of wheat produced, ave. 1968-69.....	10,000	10,000
5. Delivery quota acreage 1970 (56% of average acreage 1968-69)	280	280
6. Acres sown to wheat 1970.....	280	500
7. Yield 1970.....	20	25
8. Bushels produced 1970.....	5,600	12,500
9. C.W.B. delivery per quota acre, 1970*.....	28	28
10. Wheat delivered by producers 1970.....	7,840	7,840
11. Change in stocks held by producer 1970.....	- 2,240	+ 4,660
12. Diversion payment received.....\$	1,540	0

*Delivery quota determined by C.W.B. and based on C.W.B. sales.

Barley

At the end of the 1968-69 crop year, the carryover of barley amounted to 197.7 million bushels (Table 31). This carryover together with an estimated production of 378.4 million bushels will yield a total supply of 576 million bushels to be disposed of during the 1969-70 crop year. The Task Force estimates that the barley carryover at the end of the 1969-70 crop year could amount to approximately 267 million bushels. In order to reduce this carryover to a more manageable quantity the Task Force recommends that the Federal Government provide a further \$21 million to be used to divert barley acreage to forage or summerfallow in 1970. If an acreage diversion payment of \$7 per acre were used, it is estimated that the average 1968-69 barley acreage of 8.7 million acres could be reduced by approximately 3 million acres. If barley acreage for 1970 were reduced to 6 million acres, and if 100 million bushels of barley were exported, it is estimated that barley carryover by the end of the 1970-71 crop year could be reduced to approximately 140 million bushels, still a large carryover but a manageable one under the more competitive pricing system recommended above. A quota policy on the reduced barley acreage should be developed similar to that proposed above for wheat. During the 1970-71 crop year, the amount deliverable under the

TABLE 31
Total Supply and Disposition of Canadian Barley

	1967-68	1968-69	1969-70*	1970-71*
	(million bushels)			
<i>Supplies</i>				
Carryover (beginning of crop year).....	131.8	130.9	197.7	267.0
Production.....	248.7	325.4	378.4	240.0
Total Supplies.....	380.4	456.3	576.1	507.0
Exports, barley and products.....	41.4	26.4	60.0	100.0
Human Consumption.....	0.1	0.1	0.1	0.1
Seed.....	14.5	15.6	16.0	16.0
Industrial Use.....	17.0	17.3	18.0	18.5
Residual Item (livestock feed and waste)....	176.5	199.2	215.0	230.0
Carryover at end of crop year.....	130.9	197.7	267.0	142.4
Total Disposition.....	380.4	456.3	576.1	507.0

*Estimated

SOURCE: *Coarse Grains Quarterly* August, 1969. The figures for disposition for the crop year 1969-70 and all figures for the crop year 1970-71 were estimated by the Task Force.

quota on the reduced barley acreage should be set by the Wheat Board in a manner similar to that described above for wheat. A restriction of this type would be necessary if excessive production on the reduced barley acreage is not to be encouraged thus frustrating the attempt to reduce the current barley surplus.

The Transition Policy should be administered by the Agricultural Stabilization Board of the Department of Agricultural Industry (now the Department of Agriculture). In summary, the recommended Transition Policy is as follows:

1. Wheat acreage diversion payments amounting to \$81 million for 1970 and \$58 million for each of the two following years.
2. Wheat acreage in the Prairies would be reduced to about 15 million acres for a period of three years.
3. A barley acreage diversion payment of \$21 million for the 1970-71 crop year only.
4. Barley acreage in the Prairies would be reduced to about six million acres in 1970.
5. During the period when acreage diversion payments were being made, the farmer's delivery quota for wheat and barley would be set by the C.W.B. and based on his delivery quota acreages.

At the end of the Transition period (July 31, 1973 for wheat and July 31, 1971 for barley) the Transition Policy would be discontinued and the longer-run New Marketing Guidelines and the Prairie Grain Price Stabilization Program described above would be initiated.

Part of the necessary funds for the Transition Policy would be obtained through the discontinuance of the Temporary Wheat Reserves Act and the Prairie Grain Advance Payments Act with the remainder coming through a special appropriation from the Federal Government, as discussed above. In addition to providing a form of immediate financial assistance to Western Canadian grain producers, the Transition Policy would help to reduce the grain surplus in the Prairies. At the same time, of course, every attempt should be made to reduce the present carryover of grain by a thoroughly aggressive export program. The present situation is not any less serious than the conditions which prevailed in the early 1930's when the Federal Government had to intervene in a very decisive way to assist in the disposal of surplus wheat stocks.

The Transition Policy should definitely be regarded as a *short-run, stop-gap measure*. The Task Force feels that it would be disastrous for Prairie agriculture if the Transition Policy were to become a permanent policy. There is an urgent need in the longer-run to have agricultural policies which will permit the farmer to respond to the market forces of demand and supply. Much of the current difficulty in the grain industry arises from the fact that several policies have had the effect of insulating farmers from the market place. At the same time, however, the Task Force does recognize, and has recommended, that the grain farmer should be given some protection against disastrous and sudden drops in grain prices.

If the proposed Transition Policy appears to be drastic and relatively costly, it is because the immediate problems to be solved are extremely serious. The realities to be faced are the colossal grain surpluses, the critical income position and the growing debts of the Prairie grain farmer, and the generally depressing effect on the Prairie economy of reduced farm income. The Task Force believes that longer-run policies for the Prairie grain industry cannot be developed until the current grain surpluses have been eliminated.

The Task Force is convinced that the costs involved in a continuation of the present situation far exceed the costs associated with the Task Force proposals above. Never again should a grain surplus of the magnitude which occurred during the 1969-70 crop year be allowed to develop.

RECOMMENDATIONS

The Task Force recommends the following with respect to wheat, coarse grains and oilseeds:

1. That the marketing of wheat remain under the jurisdiction of the Canadian Wheat Board.
2. That the Canadian Wheat Board be placed under the jurisdiction of the Minister, Department of Agricultural Industry.
3. That Canada make no further concessions under the International Grains Arrangement until they are matched in full by other countries.

Canada has suffered serious losses since the summer of 1967 by making unilateral sacrifices to bring into being and to sustain the International Grains Arrangement.

4. That a Transition Policy be established for wheat and barley commencing in the spring of 1970; that wheat acreage diversion payments amounting to \$81 million for 1970 and \$58 million for each of the two following years be used to reduce wheat acreage in the Prairies to 15 million acres until 1973; that a barley acreage diversion payment of \$21 million be used for one year only to reduce barley acreage to six million acres in 1970; that delivery quota acreages be set at 56 per cent of the average of 1968-69 acreage for wheat and 65 per cent of the average 1968-69 acreage for barley for the period during which the Transition Policy operates; that the program be administered by the Agricultural Stabilization Board.
5. *New Marketing Guidelines for Coarse Grains.*—That the Canadian Wheat Board continue to be responsible for all commercial purchases of barley and oats from the primary producer but that:
 - (a) each purchase by the Wheat Board should be hedged in futures market at the time of the purchase or as an alternative, provision should be made by the Board to hedge daily a certain quantity of coarse grains in the futures market.
 - (b) all coarse grains produced in a given crop year should be sold during that period with the exception of a normal Wheat Board operating carryover, the size of which should be announced each October by the Wheat Board.
 - (c) all oats and barley delivered by the farmer should be accepted by the Wheat Board whenever offered except where delivery quotas are used in which case such quotas should be lifted entirely in May of each year.
 - (d) the price paid to the producer should be a monthly pooled price.
6. *New Marketing Guidelines for Wheat.*—That at the termination of the Transition Policy all wheat produced in a given crop year should be sold during that crop year with the exception of a normal Wheat Board operating carryover, that the C.W.B. follow a more flexible pricing strategy, that “initial” prices be set low enough to permit price flexibility throughout the crop year; that prices paid to the producer for wheat should continue to be annual pooled prices; that delivery quotas continue to be used to provide for the orderly flow of wheat to the market throughout the crop year; that the basis for the delivery quotas be “wheat acreage” rather than “specified acres” as used at present.
7. That the practice of setting initial prices for barley and oats should be discontinued as soon as the proposed Prairie Grain Price Stabilization Program is introduced.

8. That a Prairie Grain Price Stabilization Program be instituted as soon as the current grain surpluses have been reduced to manageable proportions under the Transition Policy; that grain producers be provided under the Grain Price Stabilization Program with a minimum price support at a level equivalent to 80 per cent of the average of the local Wheat Board final prices for the preceding ten-year period; that the prescribed price support be applied to a calculated yield of wheat, oats and barley on one-half of the farmer's base acreage (average for the preceding three years) for each of those crops; that a revolving fund in the amount of \$100 million be available for payments under the Program if prices fall below the prescribed minimum price support.
9. That the Temporary Wheat Reserves Act, The Prairie Farm Assistance Act, and the Prairie Grain Advance Payments Act be discontinued and that the monies normally used under these Acts be used to help underwrite initially the Transition Policy and following that the Prairie Grain Price Stabilization Program. The Program should make any future emergency programs unnecessary.
10. That the grain delivery quota system be used, if used at all, primarily as an instrument to facilitate the movement (within a given crop year) of grades of grain required by the market and to provide for the equitable treatment of farmers unable to deliver grain during any specified period of time within a given crop year.
11. That a protein-system of grading for wheat be established as soon as feasible that a market-justified price premium for protein content be established; that guaranteed protein levels be established for export wheat; that land-use policies be developed to encourage the production of high protein quality wheat.
12. That the freight subsidy of feed grain movement from the Montreal freight zone into Eastern Quebec and the Atlantic Provinces be discontinued by August 1, 1970; further that the Federal Government make direct payments to the five provincial governments i.e. Quebec, Prince Edward Island, New Brunswick, Nova Scotia and Newfoundland of the equivalent of the average payment made over the past three years on all shipments beyond the Montreal freight zone. These payments should be used on projects designed to strengthen the agricultural sector in whatever way the five provincial governments see fit, e.g. transportation or adjustment subsidies. These payments to the provincial governments should be a fixed annual sum for a period of five years commencing in 1970 and should then be gradually reduced for a further period of five years with a complete discontinuance of the subsidies by 1980.
13. That the feed freight subsidy from the Prairies into British Columbia and as far as the Montreal freight zone be removed by August 1, 1970. The same recommendations should also apply to Ontario corn.

14. That the tariff on American corn be replaced by a variable import levy which would apply whenever free market corn prices in the United States fall below the United States floor price. If the support price were \$1.05 and the free market price 95 cents per bushel, the variable import levy would be 10 cents. This would provide protection against serious distress prices for Canadian corn growers.
15. That the present marketing system for flaxseed, rye and rapeseed be maintained and that more flexibility be provided for storage of rapeseed at the Vancouver port.
16. That the Federal Government and the three Prairie Provinces jointly review the policies relating to the development of new lands and land clearing projects with the objective of preventing, wherever possible, the introduction of new lands for agricultural production at least until 1980.

APPENDIX A

THE WHEAT BOARD GRAIN DELIVERY QUOTA SYSTEM

One of the best descriptions of the Wheat Board grain delivery quota system was included in the August 1969 issue of the *Canadian Farm Economics*.¹ We quote at length from this article.

The Wheat Board administers a system of quotas whereby grain producers within the area of jurisdiction of the Board are limited to a set pattern of grain marketing with special reference as to where, when, what and how much grain may be marketed. The quota system applies to those grains marketed by the Board (wheat, oats and barley) and also the grains which are not marketed by the Board (rye, flax and rapeseed). The main objectives of the quota system are:

1. To facilitate the orderly marketing of grain by producers and in turn to enhance the efficient use of grain marketing facilities (handling, storage and transportation);
2. To reflect market demand or sales opportunities back to producers and by so doing act as an indirect regulator of aggregate production;
3. To make the management of marketings by the Board acceptable to producers through close adherence to the principle of equality.

As far as it is practicable, given the physical restraints of the handling, storage and transportation system, all producers are permitted over a crop year to share equitably (in relation to the specified acreage or in some instances seeded acreage) in marketing opportunities and in the use of marketing facilities.

The system of quotas administered by the Board consists of the following components:

1. Unit Quota: Also known as the Initial Quota because it is operative throughout the designated area immediately on commencement of the crop year, the unit quota consists of 100 units, each unit having a quantitative value in bushels when applied to wheat, oats, barley or rye. For the crop year 1968-69 these unit values were as follows: 4 bushels wheat or 10 bushels oats or 6 bushels barley or 6 bushels rye. Producers may deliver any one or a combination of these grains provided the total bushels expressed in units do not exceed 100. This quota ensures that all producers may deliver grain without regard to the size or location of their farms and since it is not based on acreage, it is of the greatest benefit to small producers.
2. General Quota: The general quota applies to wheat, oats, barley and rye and is based on specified acreage. Specified acreage consists of acreage seeded to wheat (including durum), oats, barley and rye, the summerfallow acreage and the acreage seeded to eligible grasses and forage crops. For example, a one bushel quota means that a producer may deliver a quantity not exceeding one bushel times his specified acreage. The total quantity may consist of one grain or a combination of grains. Space permitting, this process is repeated throughout the crop year, each successive round of deliveries after the first (one bushel quota) being designated as a 2, 3, 4, 5, bushel quota etc.

¹ *Canadian Farm Economics*, "The Grain Delivery Quota System of the Canadian Wheat Board", Vol. 4, No. 3, August, 1969, pp. 22ff.

although deliveries for each quota level are restricted to one bushel per specified acre. The quota level may vary according to location throughout the year although every effort is made to equalize the level throughout the designated area by the end of the crop year. Under this quota, the larger producers can avail of a proportionately greater volume of available elevator space.

3. Seeded Acreage Quota: This is applied in the case of special crops such as flax and rapeseed (in some years durum wheat) and is defined as so many bushels per seeded acre of the particular crop or a specified quantity whichever is larger.
4. Supplementary and Over Quotas: These are used to call forward specified grains for sales commitments that are not being delivered in sufficient quantity under general quotas. They are therefore additional to any previously declared quotas and are normally defined as for seeded acreage quotas although a specified quantity alone may also be called for, for example, an over quota of two carlots.
5. Special Quotas: These may be declared to meet a particular set of circumstances as during the 1968-69 season when an "advance" quota was declared for the delivery of high-moisture grain and a special quota was granted certain producers in the Red River Valley area who were threatened with flood damage. Other examples are quotas granted to the estates of deceased producers or to retired producers . . .

The present quota system constitutes a producer sales quota. It is not a production quota system. With the exception of a special policy permitting sales of feed grains to feed mills on a non-quota basis (Feed Mill Policy), producers only make a sale on delivery of their crop to the country elevator. In any given crop year production is completed before the restrictions or demands of the quota system are felt by the producer. If his production turns out to be untailed to market demand, it is only possible for the producer to be wise after the event and there is a time lag of up to one crop year before he can implement any consequent decisions.

Low quotas are said to provide a signal for a cutback in production. The quotas are not the causative factor in this cutback, however, and producers would also feel the basic market pressures without a quota system. Under these circumstances, such pressures would bear more unevenly on individual producers.

The system has been criticized as being inflexible and unable to reflect market demand. Given that the required grades and grains are in farm storage, there seems to be adequate provision in the system through supplementary and seeded acreage quotas to meet market demands of a current season. Whatever the system, there will be a natural tendency for producers to deliver the higher value grains as the opportunity arises and surely the value of the grain is a reflection of market demand. As mentioned earlier, the quota system is not a production quota system and in this sense may be considered inflexible.

Fundamental to the system is the concept of equality of opportunity to deliver, that is, allocation of available space on as equitable a basis as possible. In practice, however, it is almost impossible to design a system which is equitable for all producers. The unit quota for example puts the concept into action but is of most benefit to small producers while the general quotas benefit larger producers. Seeded acreage and other quotas tend to benefit producers of the particular commodity at the expense of other producers. It is also true that the system is biased towards wheat

production. For example, oats and barley consistently out-yield wheat in terms of bushels per acre, and with the exception of the unit quota, there is no provision for this in the system. (To some extent this is compensated for by the fact that a considerable portion of feed grain supplies are consumed on the farm.) In more general terms, the system is biased in favour of low-yield or extensive production. It has been said that the effort to achieve an equitable system has led to inefficient handling and marketing but it may also be true that such inefficiency where it exists, is part of the related problem of transportation.

In an attempt to bring about greater co-ordination between grain shipments from country elevators and requirements for terminal sales and inventory build-up, a Grain Transportation Technical Group² was established to study and to make recommendations on the overall grain marketing and transportation system in Western Canada. In October, 1968, this group submitted proposals for a new Block Shipping System. Two test shipping blocks were established in February, 1969, and by the end of June, nine additional shipping blocks were brought into operation. By October, 1969, all country elevators shipping to the West Coast terminal elevators plus two areas shipping to the Lakehead were included in the Block Shipping System.

The new shipping system is based essentially on a geographic classification of the CNR and CPR train runs into separate blocks. Each block consists of from 40 to 50 grain loading points or up to 100 country elevators situated at intervals of several miles on a common rail line.

Under the block shipping system, the Wheat Board and the private and co-operative grain organizations forecast their sales several months in advance and attempt to designate for each week the type, amount and grade of grain which is to be delivered to domestic or export customers. This information is compiled for each block and forwarded to the Wheat Board.

The Canadian Wheat Board, accordingly, advises each of the private or co-operative grain companies of the number of carloads, by type of grain, grades and destination which each company will be allowed to ship out of each block during any designated week or specific period of time. The railways are committed to spotting a certain number of cars to specific elevators for any designated week and are expected to move the cars, once loaded, to given destinations on the basis of a pre-arranged schedule. Appropriate incentives and penalties are built into the system to encourage the most efficient and predictable use of the marketing and transportation facilities.

In general, the Block Shipping System is designed to make sure that the right type and grade of grain is available at a given destination at a specified time. If this goal is to be accomplished many changes may have to be made in existing policies such as the delivery quota system and cash advances, as well as policies and programs which have tended to encourage stock building and the clogging of the market system by burdensome surpluses.

² The Grain Transportation Technical Group is comprised of representatives from the Canadian Wheat Board, the Board of Grain Commissioners, grain handling companies and the railways.

APPENDIX B

Seminar on Wheat—December 3, 1969

Department of Agricultural Economics and Farm Management
University of Manitoba, Winnipeg

TECHNOLOGICAL ADVANCES IN THE MILLING AND BAKING INDUSTRIES AND THEIR EFFECT UPON MARKETS FOR CANADIAN WHEAT

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One of the major factors which led to the rise of Western Canada as a prime wheat exporting area was the development of the roller mill in Europe about the middle of the nineteenth century. Prior to that time milling was done on stone mills, mostly operated by wind or water power. With stone mills, the whitest flour was produced by soft wheats, which readily released flour under the grinding action of the mill stones and the tough, relatively thick bran, characteristic of these wheats, did not break down too readily and contaminate the flour. Hard wheats were heavily discounted in those days as they were very difficult to reduce to flour and the relatively thin bran broke up in the process and heavily contaminated the flour. Thus hard wheats produced a dark coloured, specky, coarse flour while soft wheats produced a whiter, cleaner, finer flour. The development of the roller mill reversed this situation and led to the production of higher yields of very fine white flour from hard wheats that could not be matched using soft wheats either on roller mills or on stone mills. The addition of the Purifier to the roller mill capped the development and led to the production of such excellent flours from hard wheats that they were and still are referred to as Patent flours (referring to special flours made by the newly patented process). At the time the roller mill was developed, primarily in Hungary, that country happened to have a high percentage of hard wheat as the indigenous wheat. For many years—until the First World War—Hungarian Roller mill flour set the standard for European bakeries. Roller milling caught on very quickly—especially in the Upper Midwestern United States and shortly after in Western Canada; by the turn of the century the United Kingdom and other European countries had largely changed over to the new system.

Thus Canadian export flour was on its way, and with it, the wheat from Western Canada which produced the great roller mill flour. There were some basic differences, however, between flour milling in Western Canada and flour milling in Europe. In most areas of Europe there was a substantial local production of soft wheat which had to be utilized one way or another by the milling industry and so the roller milling system was designed to mill blends

¹ Director, Grain Research Laboratory, Board of Grain Commissioners for Canada.

of soft wheats and imported hard wheats; to get the most effective results a compromise was necessary and the systems developed were every long, employing a very gentle reduction of the flour by numerous passages through reduction rolls—the so-called gradual reduction system. In North America, where only hard wheats were milled for bread flours, the milling system used was much shorter and the technology much simpler. In the gradual reduction system, used in Europe to get the best possible results from the soft wheat component of the grist, very little damage to the starch occurred and it is now known that starch damage is one of the major factors producing the high water absorption in baking which is one of the major features of hard wheat flours milled on the shorter systems of the U.S. and Canada.

From the turn of the century to the end of World War II there was little change in the European milling industry. The value of the high protein hard wheats in an otherwise domestic soft wheat grist came to be generally recognized, although during the thirties protectionist policies in most European countries led to a drastic restriction on the amount of imported wheat used in the grist. This situation was much improved however as Europe gradually recovered from World War II. There was much new mill construction in Europe in the nineteen-fifties but the only basically new development, which did not really change the system of milling, was the introduction of pneumatic conveying of the products in the mill. During the late fifties and early sixties, however, first in eastern Europe and later in Western Europe and the United Kingdom, the possibilities of increasing productivity without adding equipment led to the redesigning of existing mills to greatly shorten the flow. With heavier loading of the rolls, more starch damage was produced with a resulting increase in water absorption of the flour. This was probably first noted in the United Kingdom where the percentage of hard wheat in the grist was much higher than elsewhere in Europe, normally fifty per cent or more. This development was well timed to take advantage of the next breakthrough in technology which was about to occur in the baking industry.

The European baking industry had long been accustomed to relatively weak, low protein flours and had adopted baking systems which appeared to be best suited for this kind of flour; mixing was very gentle and fermentation times were relatively short. The bread produced was usually heavy, with quite coarse texture and had poor keeping quality but was generally tasty. In the U.K. with stronger, higher protein flours, fermentation times were longer and mixing was somewhat more vigorous but not nearly as vigorous as in Canada and the U.S. Here the flours were considerably higher in protein and stronger because they were made from an all hard wheat grist. We had known for a long time that Canadian bakers got much better loaf volume and hence better texture and better keeping quality, than bakers in the U.K. using the same flour. In other words we knew that the protein content and general strength of bakery flours used in the U.K. were really better than they needed to produce the quality of bread that they turned out on their baking system.

In the middle fifties the baking revolution began in the United States with the introduction of the Baker process—a completely continuous automatic bread making system which did away with the traditional bulk fermentation stage, thereby greatly speeding up production and achieving great savings in space and staff required for a given level of production. This process swept the United States and within ten years of its introduction, over fifty per cent of the industrial bread production in the United States was made in this way. One of the major advantages of the process was a substantial increase in the amount of water which could be used—thereby very significantly increasing the amount of bread which could be produced from a bag of flour. There was one drawback however; the process produced a different type of bread from the conventional systems—it had the texture of angel cake and was very soft; the crust was somewhat different as well, the flavour suffered as a result. These changes were, by and large, accepted in the U.S. although the acceptance appears now to have levelled off at about 60% of total bread production. The new system was tried in Canada and in the U.K. but the new type bread did not gain consumer acceptance. In the U.K. it represented a very drastic departure from the normal bread and the system was quickly abandoned. However researchers at the British Baking Industries Research Association had obtained a custom built pilot unit for the Baker process and had done some experimenting with it. One of the major features of the process was that the dough was developed very rapidly and with a relatively colossal power input. This power requirement seemed to be relatively constant and more or less independent of the type of flour being used. Further work was done at BBIRA looking at this power input factor with a number of experimental mixers. The key operation was to get the work in quickly and only one mixer at the time seemed capable of doing this easily and at the same time offering the possibility of being scaled up for commercial bread production. Following a batch procedure, rather than a continuous operation, they found that with a power input of 5 watt hours per pound of dough, put into the dough in less than five minutes, they could completely eliminate the bulk fermentation stage and produce normal type English bread, indistinguishable in all essentials from that produced by the conventional process. This was the birth of the Chorleywood Bread Process or CBP as it is now known. The original mixer had been designed for mixing pigments, cement and other powders, certainly not for bread, but the company recognized the potential it had and quickly scaled it up and automated it for use in the Baking Industry. Within eight years about 70% of all British plant bread was being produced by this system. There are now a number of other mixers being manufactured for the process and it is beginning to spread rapidly beyond the shores of the U.K.; it has already become established as far away as Singapore, Malaysia and the Philippines.

The Chorleywood system is less elaborate than the American Baker process and is much more adaptable to the production of different types of breads; it retains the advantage of the high water absorption, characteristic of

the Baker process, and has *one very significant advantage* to the milling and baking industry of the United Kingdom; it permits the use of a considerably weaker flour without sacrifice to normal bread quality. The same bread can now be produced from 75% soft wheat and 25% hard wheat that formerly required 60-75% hard wheat. If the protein content of the flour is reduced, however, the amount of water the flour will hold goes down somewhat. The British milling industry responded quickly to this situation; they had already had some experience with increased starch damage, which favours higher water absorption, with their move to shorter milling systems. Now they turned their attention to starch damage production in earnest and quickly developed the necessary technology to produce lower protein flours for the Chorleywood process without losing out in water absorption.

Since 1960 when the Chorleywood Baking Process was first developed, sales of Canadian wheat to the U.K. have dropped quite steadily from 78 million bushels to 55 million bushels this past year. A significant factor in the speed with which the Chorleywood process took over plant bread production in the U.K. was the contemplated entry of the U.K. into the Common Market. Acceptance, by the British, of the Treaty of Rome would mean a fairly drastic change in the cost of flour and bread in the U.K.; the CBP offered an immediate opportunity to reduce the imported strong wheat component of the U.K. bread flour grist, and this point was not lost by the milling industry who by that time owned or controlled about 80% of the plant bread capacity in the U.K. Thus the decision to change over to the new process was not made by thousands of individual bakeries, but was a politically expedient decision taken by the two largest milling groups with the others forced to follow soon after. Should the U.K. join the Common Market, there is no doubt that the consumption of imported hard wheats will decline further.

The baking revolution has not yet gathered the momentum in Europe and in Japan that it has in the U.S. and the U.K.: however, it is coming. In neither Western Europe nor Japan have the bakeries come under the direct control of the milling industry, thus change will be much slower. In Eastern Europe, the advantages of the new systems in the elimination of night work in bakeries are most attractive and the problems of conversion are largely economic. Interest from this area is great however, and is bound to be further stimulated at the Fifth International Cereal and Bread Congress to be held next May in Dresden, East Germany. There will be a bakery machinery exhibition in conjunction with the Bread Congress, and for the first time it is expected that hundreds of mill and bakery technicians from the Iron curtain countries will attend the Congress and have an opportunity to measure progress made in the Western world.

The Grain Research Laboratory of the Board of Grain Commissioners has been working with both the Chorleywood process and with the American continuous systems since they were originally developed. We probably have as much experience with both systems as anyone in the world. Our results

indicate three things: first that the British system and the further future development of it, is adaptable to the production of leavened breads of the Western type as produced in any area of the world; secondly, that the quality of protein is not as important as it has been in the past with the various conventional baking systems, and that quantity of protein becomes more important as the over-all level is reduced in bakery flours; thirdly, that the bottom has not yet been reached in probing for the minimum flour quality that can be used successfully in the process. Thus, based on our experience, we can conclude that the use of imported strong wheats will diminish in countries which already produce a surplus, *over their present needs*, of soft wheats.

The problems of wheat gristing for the British miller have for many years been very complex. From well back into the last century the U.K. has had a "cheap food policy" based on free entry of raw food materials such as wheat. As a result of this policy the U.K. has been the main competitive battle ground for anyone with a surplus of wheat to export. The larger British mills long ago became experts at achieving lowest cost grists which could still meet a minimum quality standard. However, over the years the task has not been without its frustrations! The smaller mills could not afford the risks associated with this exercise and generally lacked adequate storage capacity to carry very many wheat types; they tended to rely basically on Canadian wheat as the backbone of their grist from the early years of this century and up until very recent years. They also had their headaches in attempting to maintain a constant flour quality. Until the advent of the Chorleywood Bread Process it was inevitable that the protein level in bakery flours varied somewhat from year to year; however with a large component of Canadian wheat in the bread grist and with the bakeries, as noted earlier, working well below the optimum for the quality of the flour, they managed to put up with this variation reasonably successfully. With the Chorleywood Process, however, bakers are now working much more closely to the optimum of the flour and that is why protein levels and strength can be reduced with no ill effects on bread quality. Under these conditions however, there is little margin of safety. Before CBP, flour protein levels were about 12% and, using 100% Canadian wheat this would require a wheat protein level of at least 12.8%. It will be apparent from Table I that this was just not available from Canada during the period from 1952-53 until 1958-59. It was during this period that the first high protein guaranteed wheats began to appear in the U.K. market from the United States. These were mostly U.S. Hard Winters guaranteed 14.5% protein. During this period also, production of home-grown wheat in the U.K. was increasing and, by using a deficiency payments system to subsidize the British farmer, the British government made English wheat very attractive at times to the British miller. Under this scheme, wheat was sold to the mills at whatever price it would fetch and the government made up the difference to guarantee a certain minimum return to the farmer. Thus prices were often as low as 19 pounds a ton, with imported wheats in the range of 28 to 35 pounds

TABLE I
Average Protein Levels of No. 2 Northern Wheat

Crop Year	Atlantic	Pacific	Churchill	Western Domestic
1951/52.....	13.1	13.8	14.5	14.2
1952/53.....	12.7	12.6	13.6	13.7
1953/54.....	12.6	12.5	13.7	14.0
1954/55.....	12.4	12.5	13.3	13.8
1955/56.....	12.3	12.4	13.3	13.7
1956/57.....	12.3	12.4	12.6	13.3
1957/58.....	12.4	12.7	12.8	14.0
1958/59.....	13.1	13.2	13.2	14.5
1959/60.....	13.7	13.7	14.0	14.6
1960/61.....	13.8	14.3	14.3	14.4
1961/62.....	13.9	14.2	14.2	14.4
1962/63.....	13.8	14.4	14.2	14.4
1963/64.....	14.1	14.3	14.6	14.4
1964/65.....	14.5	14.8	14.5	14.6
1965/66.....	14.4	14.7	14.9	14.5
1966/67.....	13.8	13.4	14.1	14.2
1967/68.....	13.8	13.6	13.4	14.3
1968/69.....	13.8	13.4	13.8	14.4

a ton. Heretofore little or no English wheat had gone into the bread grist but the temptation was now irresistible. By the 1959-60 crop year the protein in Canadian wheat had returned to a more reasonable level and the grist makers began to sharpen their pencils. Our protein levels remained high until 1966-67 and during this period the Chorleywood process swept the country; as it did so, flour protein levels gradually decreased as experience indicated that the former 12% protein level was no longer necessary. Presently protein levels for Chorleywood flour are in the range 10.5 to 11.0%. During this period the large British millers were very active developing the technology associated with supplying flours for the new process. Amongst other things, they applied computers to the least-cost grist question. These studies appear to have indicated that least-cost grists are composed of two principal elements: low-cost soft wheats, both English and Continental, and high protein hard wheats. The soft wheats don't vary too widely in protein from shipment to shipment and accordingly, to allow computer programming of wheat imports, the protein levels of the hard wheats have to be known to a close tolerance and the higher the better! Thus we now have U.S. Northern Springs of 14% and 15%, Russian SKS 14 and SKS 15, and Australian Prime Hards 14.5% all being offered in the U.K. on a guaranteed protein basis and, at present, supplanting a good deal of Canadian wheat in this market.

Let us have a look at a simplified version of a gristing exercise by comparing the economics of producing a 12% protein grist and an 11% protein grist from English wheat at 9% protein and various levels of protein

in Canadian wheat—such as can occur over any long period of time. Assuming a cost to the British miller of \$58 a ton for British wheat and \$80 a ton for Canadian wheat we have the situation shown in Table II. You will notice how grist cost decreases with increasing protein levels in the Canadian component, and is considerably less for the 11% grist than for the 12%. Perhaps of even greater importance politically, however, is the precipitous drop in the grist cost in terms of hard currency expenditure. Now let us calculate the value to the various hard wheat components using the reduction in cost divided by the percentage of hard wheat required. In going from 12.5% to 14.5% at the 12% grist level, the 14.5% protein wheat shows an increased value over 12.5% of 23 cents per bushel with a foreign exchange difference of 35%. At the 11% grist level in increased value of the 14.5% protein is 34 cents per bushel and the foreign exchange difference is 37%. Thus the lower the protein level of the U.K. grist, the more valuable high protein wheat becomes to the British miller and to the British economy. Now let's glance at the recent situation with Canadian wheat going into the U.K. at about 13% as against Russian SKS 15 at the same price level. Grist cost is \$68.75 with Canadian of which \$40.00 is hard currency and \$64.95 with Russian, of which \$26.45 is hard currency. Now one might argue that Canadian wheat gives a better yield of flour or is lower in ash, etc., but with the much smaller percentage of hard wheat in the grist these factors tend to lose their importance. I think it is now difficult to see why some British mills have shifted almost entirely from Canadian to Russian or Australian wheat for gristing.

It is my opinion that this general lowering of the protein in the U.K. bread grist is the reason for the change in the British view of protein levels in Canadian wheat. Formerly they indicated little interest in Canada adopting a

TABLE II
U.K. Grist Cost Relative to Protein Content of Canadian No. 2 Northern Wheat

		Ratio Can/Eng.	Total Grist Cost	Cost Represented by Hard Currency
			(Can. \$)	(Can. \$)
<i>12% Protein Grist</i>				
2 Northern wheat at	12.5%.....	85/15	76.70	68.00
	13.0%.....	75/25	74.50	60.00
	13.5%.....	65/35	72.35	52.00
	14.0%.....	60/40	71.20	48.00
	14.5%.....	55/45	71.10	44.00
<i>11% Protein Grist</i>				
2 Northern wheat at	12.5%.....	57/43	70.50	45.50
	13.0%.....	50/50	69.00	40.00
	13.5%.....	45/55	67.90	36.00
	14.0%.....	40/60	66.80	32.00
	14.5%.....	36/64	66.00	28.80

ASSUME: English wheat at \$58.00 per ton, 9% protein.
Canadian wheat at \$80.00 per ton, varying protein.

system of protein grading; at the present time they are indicating that if we cannot supply high protein wheat with guaranteed minimum levels they are not interested in using our wheat. So long as the U.S., the U.S.S.R. and Australia can supply what they want, we will have to compete or ultimately lose the business. This situation in the British market is repeated to a greater or lesser extent in Germany, Holland, Belgium and France, and most other areas where protein levels in bread flours are normally quite low, i.e., those countries where a high percentage of the bread flour grist is made up of domestic soft wheat.

There is another series of markets, increasing in size, which also requires guaranteed high protein hard wheat. These markets are in the former colonial territories of Africa, Asia, the Caribbean area, and most of the Latin American countries of Central and South America. These are areas which grow no wheat, or where wheat growing is of fairly recent origin and is, as yet, on a fairly small scale. Formerly all were importers of flour to supply their baking industries and most were importers of Canadian Hard Red Spring wheat flour. In the heyday of our flour export markets, the "edge" that our salesmen capitalized on was high protein content. Competition amongst Canadian mills and with American mills led to a steady rise in export flour protein over the years and in making their sales pitch on a flour protein basis they created a genuine need for it. That is, bakers in these areas found that the higher the protein, the more foolproof the flour was in the bakery. In the past 15 years or so this flour export business has disappeared, as mills have been built in virtually all of these areas. In return for tariff protection against imported flour, the mill usually undertakes to produce a flour as good as that formerly imported—usually high protein Canadian flour; the protein level in these Canadian flours was usually about 14% or sometimes higher. To mill a flour of this protein level requires a wheat with about 14.6% protein; in many cases while the mill is being built, representatives come to Canada to make arrangements for a supply of Canadian wheat to make such a flour. Alas, in only two years during the past 25 have our average protein levels been this high. For many years the Canadian mills, especially those in Western Canada, have been selecting high protein wheat for their grists. While during the past 25 years the average protein level of No. 2 Northern has averaged 14% or better only in three years at the Atlantic coast and six years at the Pacific coast, the average protein of this grade used by Western Canadian mills has dropped below 14% only four times and on each of these occasions it was at least 1% higher than that exported during the same year. While this selection enabled the mills to do an excellent export business, it now comes home to haunt us, as we have no mechanism to supply these markets with the high protein wheats they need. And so in these areas as well we need selected high protein wheats at guaranteed protein levels to compete in the market.

This situation is however an interim one; the interim may be fairly long but there is little doubt that eventually the baking revolution will take hold in these areas as well. When it does, the need for high protein flours will

disappear and these markets should eventually be well satisfied with a wheat protein level of about 13%, provided they do not get into the business of growing their own soft wheat! Already the CBP has taken hold in Singapore and Malaysia—formerly good markets for high protein Canadian flour. Before CBP, a domestic milling industry was established and we managed, during our high protein years, to sell a fair volume of wheat. But with the introduction of the Chorleywood Bread Process the wheat flour grists are now almost 100% Australian FAQ wheats, as flour protein levels are down to about 11%. There seems little doubt that this is the direction of the future in most of these areas.

In the past the Canadian milling industry has claimed, and quite justifiably, that the sale of export flour sold Canadian wheat at home. Now that the export flour markets have all but disappeared we should be prepared to make the same selection of high protein wheat to offer to our potential customers as was formerly made by the Canadian milling industry for use in the manufacture of export flour.

To summarize briefly, the major technological change affecting sales of our traditional grades of Canadian wheat, and likely to have an increasing impact in the future, is the revolution in the baking industry. The milling industry, in the U.K. and increasingly elsewhere, is learning to cope with the changed situation, reducing the protein content of the bread flour grist and increasing the extent of starch damage in the flour so that bread yields are maintained. In countries where there is a high production of soft wheat the requirements are for imports of high protein hard wheats of maximum protein uniformity; over-all quantities of imported wheats will decrease but the business will go to the countries able to supply the right type of wheat. Not only does the use of high protein wheat result in minimal grist cost but foreign exchange requirements are minimized as well.

The revolution has not yet swept many of the underdeveloped areas of the world and these markets will continue to require high protein wheats for some time. Even when the revolution arrives it may still turn out that in some areas the most economical grist will be one made up of a combination of cheap imported soft wheat and high protein hard wheat.

Chapter six

LIVESTOCK AND POULTRY

INTRODUCTION

The livestock and poultry industries exhibit a combination of healthy trends the growing challenges. Consumption of red meat and poultry meat has expanded remarkably on a per capita basis from 154 pounds in 1953 to 195 pounds in 1967 and is projected to be 217 pounds in 1980. The red meat industry has not grown up behind high protective walls but operates as part of a continental market interrupted by modest Canadian and American tariffs. The poultry meat industry has experienced amazing expansion in output and consumption largely as a result of greatly reduced costs of production and processing. Canadian pork is of such quality that about 50 million pounds of it can be exported every year at prices well above American pork prices.

On the other hand, these industries have immediate and long-run problems. With record stocks of unsold grain accumulating, what has prevented Canadians from producing far more livestock and poultry and exporting them to the huge American market? Obviously the levels of expected costs and returns have led farmers to produce more and more wheat rather than to increase output and exports of livestock. A crucial question is whether we are remaining competitive in beef production especially with the huge American feedlots. Vertical integration has brought such efficiency or low margins (or both) in the United States broiler and turkey industries that our industries are threatened, even behind present tariff walls of two cents per pound on live birds and five cents or 12½ per cent on dressed birds. Can we afford

marketing board policies aimed at quota production and elimination of vertical integration when there are such powerful competitors just south of the border? Why has Canadian egg consumption increased by only a total of six per cent in the nine year period from 1956-60 to 1966-68? Are we operating wasteful and contradictory feed grain programs through feed-freight assistance and Wheat Board pricing? Are we sufficiently aware of regional problems of production, marketing and income? While it is true that the Canadian and American markets for beef are expanding rapidly (both per person and in total) there is a threat that the huge stocks of grain and the enlarging grain production potential both north and south of the U.S.-Canadian border could produce such volumes of beef and pork as to undermine prices in the continental meat market.

These are some of the crucial questions which must be taken up here and in the chapter on Wheat, Feed Grains and Oilseeds. In this chapter we must consider in particular the possibility of increased exports of beef to the United States and the most appropriate form i.e. feeders, slaughter cattle or dressed beef—in which increased exports might occur.¹

BEEF CATTLE

An outstanding feature of the beef cattle industry has been the remarkable growth of consumption in both Canada and the United States. Beef is one of the few farm products for which higher incomes lead to higher per capita consumption; for most farm products expanded consumption comes almost entirely as a result of increases in population. Table 1 shows consumption trends and projected levels in 1980. The estimate of 100 pounds of beef consumption per capita² in Canada may well be low by as much as ten pounds but we have accepted the more conservative figure for our “materials balance” calculations for 1980.

Canadian output of beef and veal (excluding exported live cattle and calves) increased by 50 per cent between 1959 and 1968 (Table 2). Exports in all forms (live or dressed, cattle or calves) have varied widely from year to year in volume and composition yet there is no apparent trend toward either an increase or a decrease. In the period 1961-67 exports of live cattle were 7.6 per cent of Canadian output and exports of live calves were 13.6 per cent of output. Exports and imports of dressed beef and veal were in balance over the period 1958 to 1968 but varied from year to year, probably on the basis of variations in cow slaughter in Canada.

¹ This chapter draws heavily on a study undertaken for the Task Force “An Assessment of Current and Prospective Trade Patterns, Supply and Demand Situations for Cattle and Beef, Hogs and Pork, with Reference to Canada’s Competitive Position in the North American Market” by R. G. Marshall of the University of Guelph.

In this Chapter we have made no effort to provide descriptive material and statistics except where they have immediate bearing on the problems and policies under discussion. Excellent description and statistics are to be found in Canadian Agricultural Outlook Conference 1969, Canadian Department of Agriculture.

² From *Supply-Demand Projections for Canadian Agriculture—1980*. See also Chapter 10, Canadian Agriculture in 1980—A Materials Balance Approach.

TABLE 1

Per Capita Consumption of Meats, Poultry, Eggs, Canada, 1961-68 and Projected 1980

	Beef	Pork	Veal	Mutton and Lamb	Other Meats	All Red Meat	Poultry Meat (Evisc.)	Eggs
	(pounds)						(doz)	
Av. 1951-55.....	61.6	51.6	7.9	2.3	10.4	133.8	—	—
Av. 1956-60.....	69.3	50.5	7.7	2.8	10.1	140.4	—	—
1961.....	70.5	50.3	6.8	3.5	8.8	139.9	31.1	22.6
1962.....	71.1	50.1	7.1	3.8	8.5	140.6	31.0	22.5
1963.....	74.3	50.7	6.5	4.0	8.4	143.9	33.0	21.5
1964.....	79.4	51.8	7.2	3.4	8.4	150.2	35.0	21.5
1965.....	83.6	47.9	8.3	2.8	7.8	150.4	36.6	21.3
1966.....	84.1	46.9	7.0	3.4	7.8	149.2	39.3	20.5
1967.....	84.0	53.8	7.2	3.6	8.6	157.2	40.7	21.2
1968.....	86.8	53.6	6.4	4.2	8.5	159.5	39.7	21.3
1980*.....	100.0	50.0	6.9	3.3	8.0	168.2	49.0	19.1

*Projected

SOURCE: Columns 1 to 6—*Canadian Livestock & Animal Products Statistics* Cat. No. 23-203 DBS 1969.Columns 7 and 8—*Production of Poultry & Eggs 1968* Cat. No. 23-202 DBS 1969Projected 1980 from *Supply-Demand Projections*, op. cit.

TABLE 2

Beef and Veal, Prices and Exports of Cattle, Calves and Beef, Canada, av. 1955-57 to 1968

	1	2	3	4	5	6
	Animals 1 June	Beef and Veal Output	Av. weighted prices	Live exports		Net exports of beef
	thous. head	million lbs.	\$.cwt	Cattle	Calves	million lbs.
Av. 1955-57.....	10,956	1,332.9	14.60	120.3	6.6	-17.6
1958.....	10,990	1,321.6	19.21	611.4	12.4	+24.2
1959.....	11,058	1,273.5	20.32	275.2	30.3	-24.0
1960.....	11,337	1,391.4	18.50	204.5	30.7	-23.1
1961.....	11,934	1,444.7	18.75	430.0	28.8	-18.0
1962.....	12,067	1,446.6	20.90	416.0	36.6	-29.6
1963.....	12,365	1,549.8	20.20	208.7	35.3	-38.2
1964.....	12,994	1,714.5	18.45	135.2	48.9	- 5.0
1965.....	13,260	1,912.5	18.45	498.9	60.9	+63.6
1966.....	12,879	1,898.0	21.80	377.1	106.0	+33.6
1967.....	12,781	1,887.4	23.25	138.3	86.3	-25.3
1968.....	12,566	1,990.1	23.20	171.5	137.4	+26.2

Col. 1 Number of cattle and calves on farms.

4 Over 200 lbs. and other than dairy and purebred.

5 Under 200 lbs.

6 Export is + and import is —.

SOURCE: *Livestock and Animal Products Statistics* and Catalogue No. 32-220, D.B.S.

“Output” of beef refers to the number of animals exported live along with those actually slaughtered domestically and made available to consumers; “inventories” refer to numbers on farms. For some years the rate of growth in beef output has been greater than that in inventories because animals have been fed to heavier weights before slaughter and have been fed more heavily and therefore reached a heavier slaughter weight at an earlier age.³ While both of these trends are likely to continue, any substantial increase in beef output will require an expansion in the breeding herd, i.e. an expansion in cow-calf operations.

SHOULD FEEDER CATTLE OUTPUT BE GREATLY EXPANDED

This question is one of the most important and also one of the most complex that faces Canadian agriculture. It is important because it could represent a major alternative use for those prairie acres which the Task Force has recommended (in Chapter 5) should be diverted from wheat. One possible use of this land is in barley production for feeding in Canada and for export. This use of prairie land is promising, given the expected large increases in barley exports to Japan in particular. However there are limits to what can be exported because of policies in the United Kingdom and European Economic Community. The United Kingdom has subsidized barley production until she is almost self-sufficient and is likely to continue to do so. The European Economic Community has established a corn-barley price ratio that favours corn imports over barley and leads to subsidized exports of barley by France. The Task Force has given considerable emphasis to increased barley production on the prairies and foresees exports of 100 million bushels in 1980.⁴ Yet increased acreage of barley to satisfy domestic and foreign demands will not use up all the acres which must be withdrawn from wheat.

Rapeseed, too, offers real promise of becoming the wonder crop on the prairies and will account for a substantial diversion of land from wheat. As with barley, however, rapeseed is unlikely to be a complete answer to the wheat diversion problem.

Thus “Should cattle production be greatly expanded?” becomes crucial as a possible answer to the wheat surplus problem. As will be apparent in this document, the Task Force concluded that all three—beef exports, rapeseed exports, barley exports—will share more or less equally in contributing to a solution to the wheat surplus problem.

³ A recent study estimated that through 1954-59 to 1960-62 over one-half of the increase in farm output of beef arose from heavier carcass weights but that this proportion declined to less than 10 per cent in 1960-62 to 1965-67. The study indicates that Canadian growth in beef output through most recent years has been to a considerable extent sustained by a depletion of the breeding herd—a process that of necessity can be but a short-run phenomenon. See Lohar, J. S., “Prospects for Increasing Beef Supplies in Canada”, *Canadian Farm Economics*, C.D.A., April 1969.

⁴ See Chapter 5, Wheat Feed Grains and Oilseeds and Chapter 10 Agriculture in 1980: A Materials Balance Approach.

The question "Should cattle production be greatly expanded?" raises a host of sub-questions: What would be the source of feeders and the cost of raising them? What are export prospects for feeders? Should we feed more cattle and try to export fed cattle or dressed beef rather than feeders? Assuming a particular development is desirable, should governments merely encourage farmers to follow it or should they provide financial assistance or guarantees for desirable kinds of adjustment?

Sources of Expanded Feeder Cattle Numbers

In Canada a much smaller proportion of calves dropped per year become feeder cattle than in the United States. Calves slaughtered or exported as veal account for 24 per cent of all calves born in Canada and for only twelve per cent in the United States. Both countries were similar in their proportions (at about 28 per cent) in the early 1950's but producers in the United States have changed their practice while Canadians have not. Column 4 of Table 2 shows the dramatic increase in Canadian exports of calves, from less than 7,000 per year in 1955-57 to 137,000 in 1968. These exports consist mostly (if not entirely) of calves from dairy herds in Eastern Canada, mainly Quebec. In 1968, 75 per cent of the 137,000 head exported moved in April to June; during the year 96,000 were sold directly into export from Quebec and 22,000 from Ontario. Exports of veal calves were the equivalent of 18 per cent of inspected Canadian calf slaughter in 1968.

These veal calves are mostly dairy calves, sold shortly after birth and slaughtered soon thereafter to satisfy a specialty market on the eastern United States seaboard. They could be retained in Canada and subsequently become part of the feeder cattle or fed cattle supply. Quebec dairy farmers are opting to breed their dairy cows to dairy bulls and sell many of the calves as veal. Other alternatives would be to raise the calves and sell them as feeders or feed them at home or alternatively, to breed some of these dairy cows to beef bulls and enter the dual business of milk production-feeder cattle production.⁵ Such alternatives deserve attention by those farmers who seek to increase total revenue per farm. Yet, given the extra technical knowledge required, it is probable that there will be only a modest trend in this direction so long as current relative prices for feeders, New York veal and industrial milk prevail.

Industrial milk production is popular largely because of current heavy rates of subsidy but feeder cattle production is unsubsidized. Some of the proposals made later in this chapter and in that on Dairy would lead to considerable expansion of feeder cattle production in what are presently industrial milk producing areas of Ontario and Quebec. In a few cases it might mean complete change-over from a dairy herd to a beef herd but generally it would occur at the margin on individual farms whereby the farmer would continue to produce milk but also produce beef from dairy-beef steers and heifers.

⁵ These latter alternatives have attractive possibilities discussed in Chapter 7 on Dairy. See also the article by Pigden and Lister on this subject in the *Agricultural Institute Review* of Nov-Dec 1968.

In South-western Ontario there may well be a trend toward producing calves from cows kept as a complement to a regular beef feed lot operation, with the cows frequently acting as scavengers. In the more extreme case there may be confinement handling of beef cows. This would provide a whole new dimension to beef production and deserves considerable attention. At this point it is still tentative and its future impossible to predict.

While there may be considerable growth in feeder production in the eastern dairy areas and possibly in corn producing areas, the major potential for any large increase in feeder cattle production must be on the Prairies. In the traditional areas of feeder cattle production (such as the rangeland of Alberta and the interior of British Columbia) expansion in output would encounter rapidly increasing costs; it would be expensive to up-grade the carrying capacity of rangeland now in use. Thus one must turn to the possibilities of converting prairie grain-growing land into tame hay and grass and of replacing grain growing operations in some prairie areas by cow-calf operations.

If 4 million acres of prairie cropland were converted to tame hay and grass and used in cow-calf operations the output would be about 720,000 feeders per year once the operations were in full production. The basis of this calculation is as follows: assuming that four acres are required for a cow (year round) plus its calf (spring to late fall) plus bulls and female replacements, 4 million acres could accommodate 1 million beef cows. With calf crops at about 85 per cent, the 1 million cows would produce 850,000 calves per year. About 15 per cent of these would be retained as replacements leaving 720,000 feeders for sale per year. If these estimates are correct it would require 5.5 acres to produce one feeder for sale. In addition there would be a flow of discarded cows entering the lower quality beef trade largely in competition with imports. It is recognized that these are rough figures and the realism of them will depend in particular upon the kind of soil converted to hay and grass. In the park land this figure of 5.5 acres (to produce a feeder) may be somewhat high but should be about right on average.

The Export Market for Feeders

The United States tariff structure on cattle and beef is a peculiar one, putting a heavier tariff on feeders (2.5 cents per pound) than on fed cattle (1.5 cents) as shown in Table 3. This is exactly the reverse of usual U.S. tariffs, which place lower tariffs on unfinished than finished goods. Task Force discussions in Washington indicate that this structure is the result of historical accident rather than conscious policy. It appears too that very little attention was paid in the Kennedy Round of tariff negotiations to the possibility of lower tariffs on cattle and beef. Canada and the United States did agree at that time to reduce their tariffs on hogs and pork.

Given that 100,000 to 350,000 Canadian feeder cattle are exported annually in spite of a 2.5 cent per pound U.S. tariff, it appears that Canadian

TABLE 3
Canadian and United States Tariffs on Livestock, Beef and Veal

	Canadian rate on Imports		U.S. rate on Imports
	from USA	from Australia, N.Z.	
	(cents per pound)		
Purebreds for breeding.....	free	free	free
Dairy cows over 700 lbs.....	1.2	"	1.3
Calves under 200 lbs.....	1.5	"	1.5 on first 200,000 per fiscal year 2.5 thereafter
Calves 200 to 699 lbs.....	1.5	"	2.5
Cattle 700 lbs. and over.....	1.5	"	1.5 on first 120,000 per quarter and 400,000 per fiscal year 2.5 thereafter
Beef and veal, fresh, chilled, or frozen...	3.0	3.0	3.0 subject to quota

cattle feeders have been favoured by the relative U.S.-Canadian prices of feeders and slaughter cattle.⁶ This may be explained as follows: because we are consistent exporters of feeders, the price of Canadian feeders must be less than that of similar U.S. feeders by approximately the cost of the tariff (2.5 cents) and transportation to U.S. markets. We are exporters of slaughter cattle on a contingency rather than a consistent basis and in fact are on occasion importers. Thus our prices of slaughter cattle are usually well above the "export floor" price, which would be the U.S. price of slaughter cattle minus tariff (1.5 cents) and transportation to U.S. markets.

This line of reasoning is partially borne out later in this chapter, where it is estimated that Canadian slaughter cattle prices would have to decline by \$2.00 or more and feeder cattle prices by only \$1.00 relative to average 1965 to 1968 prices in the United States in order to expand Canadian exports considerably. Because of the decline in Canadian cattle inventories during 1965-68 and the high demand for feeders in 1969 (accompanying the build up of prairie grain stocks) Canadian feeder cattle prices have risen and exports have almost disappeared in 1969. Thus the price of feeder cattle would have to decline much more than \$1.00 per hundredweight from 1969 price levels in order to expand feeder cattle exports. Relative Canadian-U.S. feeder cattle prices are by no means "normal" in 1969.

⁶ While all cattle weighing over 700 lbs. have been categorized as "slaughter cattle", a considerable number of cattle in this weight range consist of heavier weight feeder cattle. For example, in 1968, of the 54.3 thousand head exported and falling in this category about 21.5 thousand moved as feeders with 32.8 thousand listed as export for immediate slaughter. Since the tariff rate on cattle in this weight range is 1.5 cent/lb. rather than the 2.5 cent/lb. applicable to cattle 200-700 lbs., a tariff advantage is given to feeder cattle of heavier weights. Probably also included in this category are some cows for slaughter purposes.

Table 4 indicates the wide variation in feeder cattle exports to the United States, a variation which has arisen largely because of discrepancies in the Canadian and American cattle inventory and feeding cycles. The price differentials of Table 4 fit well with the changes in volume of exports. While price comparisons are hazardous,⁷ it appears that very large exports can occur if the differential widens to about \$2.00 per hundredweight and smaller but substantial exports if the differential were \$1.00.

TABLE 4
Exports of Feeder Cattle (200-700 lbs.) Feeder Cattle Prices Kansas City and Calgary—
1959-1968

	Can. Feeder Cattle Exports 200-700 pounds	Good Stocker Steer Prices		
		Kansas City	Calgary	Price Differential Kansas City- Calgary
	(thous. head)		(Can. \$ per cwt)	
1959.....	183.2	24.62	23.08	1.54
1960.....	138.9	22.26	19.90	2.36
1961.....	332.5	22.62	20.50	2.12
1962.....	342.9	26.38	24.20	2.18
1963.....	156.0	24.67	23.25	1.42
1964.....	88.0	21.27	20.70	.57
1965.....	357.0	24.19	21.95	2.24
1966.....	282.3	27.32	24.50	2.42
1967.....	102.8	26.49	26.40	.09
1968.....	108.8	27.82	26.40	1.42

SOURCE: Catalogue No. 32-220, D.B.S.

Column 1 of this table differs from Column 4 of Table 2 because the latter includes animals weighing more than 700 pounds, many of them destined for immediate slaughter and the remainder for short term feeding and slaughter.

Exports of feeders (200-700 pounds) and slaughter cattle (over 700 pounds, but note Footnote 6) have been the equivalent of 8 to 30 per cent of Canadian commercial steer and heifer marketings over the past 10 years (Table 5). This large proportion emphasizes the great importance of the U.S. market to the Canadian cattle industry. By contrast, imports of feeders into the United States have varied from 2.3 to 6.5 per cent of cattle placed on feed in the United States and have averaged about four per cent (Table 6).

⁷ In Table 4, for example, we present the prices of Good Stocker Steers in Kansas City and Calgary, taking these prices as more or less representative of feeder cattle prices. However Good Stocker Steers are assumed to represent yearlings of 600-700 pounds whereas most Canadian feeder cattle exports are calves of 6-8 months of age weighing 400-500 pounds sold at higher prices. Heifer prices also vary from steer prices. Thus Good Stocker Steer prices do not necessarily reflect the price of "feeder cattle" since the latter includes calves, yearling steers and heifers in varying proportions and somewhat varying relative prices.

TABLE 5

Exports of Canadian Slaughter and Feeder Cattle to the U.S. Average Annual Prices of Choice Steers—Chicago and Calgary, 1954 to 1968

	1	2	3	4	5	6
	Exports		Exports as % of Canadian Marketings	Average Prices Choice Steers		Price Differential Chicago- Calgary
	200—700 lbs.	over 700 lbs.		Chicago	Calgary	
	(thous. head)		%	(Can. \$ per cwt.)		
1954.....	3.6	49.0	4.2	24.18	19.94	4.24
1955.....	1.9	20.0	2.0	23.70	19.60	4.10
1956.....	1.3	3.0	0.4	22.35	19.50	2.85
1957.....	139.5	195.4	14.2	23.08	18.50	4.58
1958.....	370.1	241.3	26.2	27.30	22.93	4.37
1959.....	183.2	92.0	29.5	27.31	24.30	3.01
1960.....	138.9	63.6	16.0	25.77	21.85	3.92
1961.....	332.5	97.6	14.7	25.38	21.75	3.63
1962.....	342.5	73.1	23.6	29.41	25.60	3.81
1963.....	156.0	52.7	21.4	26.14	23.25	2.89
1964.....	88.0	47.1	10.8	24.85	21.95	2.90
1965.....	357.0	141.9	11.6	27.74	23.60	4.14
1966.....	282.3	94.4	20.2	28.22	25.50	2.72
1967.....	102.8	16.9	13.7	27.76	26.65	1.11
1968.....	108.8	54.3	7.7	—	—	—

SOURCES: Columns 1 and 2 from *Livestock Market Review*, C.D.A., Annual Issues 1954-1968
 Column 3 Exports as percentage of Canadian commercial marketings of steers and heifers and calculated with 200-700 lb. cattle entered with a one-year lag.
 Columns 4, 5 & 6 *Livestock and Animal Products Statistics*, D.B.S. Annual Issues 1954-67.

Of this four per cent Mexico now provides about three per cent and Canada the remaining one per cent. Our exports are of minor importance to the U.S. market. It appears that no increase can be expected from Mexican sources given a continuation of recent conditions in that country.

It is important to note that efforts to expand the export of Canadian feeder cattle to the United States might encounter two major snags. One is that U.S. production might itself increase to such an extent that feeder prices would fall. In 1966, a total of 63 million acres of American cropland were reported as being retired from production⁸ because of acreage diversion payments and allotment programs such as that for wheat. About three-quarters of this land could easily be used for pasture and thus for cow and calf operations but the U.S. Department of Agriculture and most U.S. farm organizations are opposed to such use. A remarkable number of feeders could be produced on these 45-50 million acres.

The second possible obstacle to increased exports of Canadian feeder cattle might be the imposition of quotas on imports of feeder cattle. Past experience has shown that the U.S. Government is quite willing to take such action in

⁸ See *Productivity of Diverted Cropland*, ERS 398, U.S. Department of Agriculture, 1969.

TABLE 6

Live Cattle Imported into the USA Compared with Placements of Cattle on Feed, 1955 to 1968

	1	2	3	4	5	6
	Total Imports Live Cattle		Placements of Cattle on feed	Imports as percentage Placements	Imports from Canada of Cattle over 200 pounds	
Year	200-699 lbs.	700 lbs. and over				
	(thous. head)			%	(thous. head)	%
1955.....	191.8	73.7	10,904	2.4	22.2	0.20
1956.....	97.9	14.0	11,534	7.2	4.4	0.04
1957.....	434.9	230.3	11,051	6.0	346.5	3.14
1958.....	776.8	311.7	12,528	8.7	615.0	4.90
1959.....	503.7	136.0	13,465	4.8	278.6	2.07
1960.....	509.6	80.5	13,534	4.4	206.1	1.52
1961.....	835.5	125.1	14,375	6.7	435.1	3.03
1962.....	1,041.6	108.5	15,960	7.2	424.4	2.66
1963.....	688.9	69.2	16,275	4.7	201.2	1.24
1964.....	403.4	47.7	17,711	2.5	133.7	0.76
1065.....	863.8	150.6	18,763	5.4	500.6	2.67
1966.....	828.1	105.4	20,500	4.6	375.3	1.83
1967.....	608.0	21.9	21,700*	2.9	140.1	0.45
1968.....	803.0	59.0	22,780*	3.8	171.5	0.75

SOURCES: *Livestock and Meat Situation* USDA, various issues.

Col. 4 = Cols. 1 + 2 as % of Col. 3. Note Footnote 6 however which indicates that many of cattle in Col. 2 are slaughtered not fed.

Col. 6 = Col. 5 as % of Col. 3

*Estimated

regard to other products regardless of the consequences on foreign exporters. In this case however the Canadian component of American cattle placements is so small, (one per cent) the U.S. fed beef market is expanding so rapidly, pressures from U.S. feeder producers (wanting import restrictions) would be countered by U.S. cattle feeders (wanting lower priced feeder cattle) and demands by consumer for lower beef prices are so insistent, that it would appear unlikely that quotas would be imposed.

In summary, then, it appears that Canadian exports of feeder cattle could be increased from about 115,000 head per year in 1967 and 1968 to 500,000 head per year with a decline of about \$1.00 per hundredweight in price relative to recent American-Canadian relative prices⁹ up to 1969 and without affecting U.S. prices to such an extent that barriers would be raised. Even at 500,000 head per year Canadian exports would only equal average Mexican exports to the United States in 1964-68 (Table 6).

⁹ Note that this implies that had Canadian feeder cattle prices been about \$1.00 per hundredweight lower than they were in a particular year, exports could have been vastly increased.

*Should the Emphasis be on Feeding More Cattle
and Exporting Fed Cattle or Dressed Beef?*

The proposed market would be the United States, now the largest importer of beef in the world. In 1968 beef imports by the U.S. were seven per cent of U.S. production and equal to 80 per cent of total Canadian production of beef and veal.

Canadian exports of dressed beef and veal and a heavy cattle are insignificant on the American market. In 1968 Canada exported about 60 million pounds of dressed beef and veal and the equivalent of another 30 million pounds in the form of 60,000 cattle weighing over 700 pounds each. In contrast to this total of 90 million pounds, U.S. total imports of dressed beef and veal were 1,520 million pounds and U.S. domestic production was 21,620 million pounds (Table 7).

U.S. beef imports are mainly of boneless beef in chilled or frozen form from Australia and New Zealand. A survey conducted by the U.S. Tariff Commission indicated that only a very small percentage of imported beef was sold in retail outlets as fresh or frozen table beef cuts but that most of it was sold as hamburger or in processed products such as frankfurters, sausages,

Table 7
United States Domestic Beef and Veal Production, Beef Imports, 1955 to 1968

	1	2	3	4	5
	Beef and Veal Production	Imports	Imports as a % of Production	Imports from Canada	
					% of U.S. Imports
	(carcass weight) (million pounds)			(million pounds)	
1955.....	15,147	229.0	1.5	9.7	4.2
1956.....	16,094	211.0	1.3	16.2	7.7
1957.....	15,728	395.0	2.5	53.0	13.4
1958.....	14,516	909.0	6.3	61.3	6.7
1959.....	14,588	1,063.0	7.3	27.2	2.6
1960.....	15,837	775.0	4.9	22.7	2.9
1961.....	16,344	1,037.0	6.3	34.0	3.3
1962.....	16,313	1,439.8	8.8	24.2	1.7
1963.....	17,357	1,677.5	9.7	21.3	1.3
1964.....	19,459	1,085.2	5.6	34.9	3.2
1965.....	19,744	941.8	4.8	88.1	9.4
1966.....	20,631	1,204.0	5.8	71.0	5.9
1967.....	21,004	1,341.9	6.4	34.6	2.6
1968.....	21,620	1,517.9	7.0	60.0*	4.0

Col. 1 and 2 from: *Livestock and Meat Situation*, E.R.S., U.S.D.A., Various Issues.
Col. 4 from: *Livestock and Animal Products Statistics*, D.B.S., Various Issues.

*Estimated

TABLE 8
United States Beef and Veal Imports by Country of Origin, 1961-1968
Million Pounds (Product Weight)

Year	Canada	Mexico	Argentina ¹	Ireland	Australia	New Zealand	Total
1961.....	32.3	53.4	65.2	64.4	233.9	154.4	689.2
1962.....	19.4	59.3	55.9	70.7	441.7	213.6	967.5
1963.....	17.2	73.0	87.4	72.9	517.0	235.7	1,122.4
1964.....	28.8	48.9	54.4	20.1	377.0	168.1	800.4
1965.....	71.4	46.3	54.8	7.8	307.4	103.6	701.1
1966.....	57.2	57.1	80.5	38.4	404.1	145.0	893.3
1967.....	26.7	47.8	108.1	80.6	474.7	171.0	980.0
1968*.....	46.7	65.6	132.6	56.3	444.0	203.1	1,128.0

*(preliminary)

¹ The prevalence of foot and mouth disease in South American countries restricts beef imports from Argentina and Uruguay to canned and processed products only.

Note that data of Table 7 are in pounds of carcass whereas data in this table are in pounds of product.

SOURCE: *Foreign Agricultural Trade of the United States*, E.R.S., U.S.D.A. Various Issues.

bologna and other luncheon meats.¹⁰ This pattern still seems to apply. The large imports of boneless beef meet a demand for lower quality beef not satisfied by U.S. output of cow and bull beef. With the declining dairy cow numbers and the increasing proportion of cattle marketed through feedlots it is likely that there will continue to be a substantial American market for low quality imports. Imported beef is in direct competition with U.S. cow beef but does have some effect on the prices of fed cattle and higher quality beef.¹¹

Up to 1964 beef and veal entered the U.S. market subject to the tariff rates given in Table 3 but free of quotas. The heavy beef importation of 1963 together with a decline in cattle prices in the U.S. brought pressure on the U.S. Government to restrain beef imports. In early 1964, the governments of Australia, New Zealand, Ireland and Mexico agreed to limit their annual exports of certain meats (including beef) to the United States. The quota limitations specified for 1964 in the four agreements represented approximately the average annual U.S. imports from the respective countries in the two years 1962-63.¹²

In August 1964, the United States Government took further steps to contain beef imports through Public Law 88-482. Under this law import quotas were provided for any year beginning with 1965 for which the Secretary of Agriculture estimated that imports will equal or exceed 110 per cent of a base quantity. The base quantity specified by the law is 725.4 million pounds of product weight (approximately the 1959-63 average imports). This base quantity would be increased (or decreased) by the same percent-

¹⁰ *Beef and Beef Products*, United States Tariff Commission, Publication No. 128, January 1964, p. 12-14.

¹¹ A U.S. Department of Agriculture study for 1948-62 indicated that a one pound per capita change in the supply (domestic or imported) of cow beef was associated with a decline of 30 cents per hundredweight in the price of choice steers in Chicago.

¹² *Beef and Beef Products*, op. cit., p. 104.

age that the U.S. estimated average annual commercial production increased since the five year base period 1959-1963. In other words, quotas are tied to a calculated share of U.S. commercial output. Imports of beef in the years 1964 to 1967 were well below levels that would have required quotas. In 1968 imports were only 55 million pounds below the adjusted base quota of about 1,056 million pounds (110 per cent of the adjusted base quantity).¹³

The Australian Meat Board imposed voluntary export restrictions in 1968 and 1969 to ensure that they did not trigger the U.S. quota machinery.

It seems obvious from the kind of competition which would be encountered in the American market from lower quality Australian and New Zealand beef that Canadians should not plan to export such beef. Indeed, Canada also imports such beef from Australia, New Zealand and Argentina, an indication that we have few advantages in such a trade. The foregoing analysis indicates that it would be unwise to emphasize the production and export of low quality beef except as it is made available from dairy cows and similar residual sources.

What are the prospects for exporting slaughter cattle or high quality dressed beef? These are alternatives because the finished cattle could be slaughtered in Canada and certain cuts exported or alternatively the fed cattle could be exported for immediate slaughter or for some further finishing and then slaughter. Slaughter cattle are commonly identified in the trade statistics as cattle over 700 pounds (the weaknesses in this definition are given in Footnote 6.) For cattle over 700 pounds the U.S. tariff is 1.5 cents per pound rising to 2.5 cents above 120,000 head per quarter or 400,000 head per fiscal year. Canada's exports in this category have averaged only 78,000 per year in 1965-69 inclusive and total U.S. imports of such cattle have been about 90,000 per year. Thus there is room for considerable expansion before reaching the tariff quota of 2.5 cents. However if exports of fed cattle reached such levels at a time when U.S. prices were low, one might expect agitation by U.S. producers to impose limits on imports. In this case both American producers of feeders and those feeding them would be ranged on the same side. This is in contrast to the division of forces anticipated above in connection with proposals to limit imports of feeders.

In Table 9 periods have been selected to illustrate the two-way flow of slaughter cattle across the U.S.-Canadian border and the corresponding fed cattle price relationships that prevailed during this period. Of importance here is the fact that in recent years the export of slaughter cattle from Canada to the U.S. has not been a continuous process and accordingly the average price received for Canadian fed cattle has averaged above the "export floor" imposed by U.S. fed cattle prices.

The price differential between an "export floor" and an "import ceiling" is around \$4.50 per hundredweight. It appears that Canadian fed cattle prices have averaged about \$2.00 per hundredweight or more above the "export

¹³ *Livestock and Meat Situation*, February 1969.

TABLE 9
Canadian Cattle¹ Exports-Imports and Average Prices

	Average Weekly		Average prices choice steers		
	Exports	Imports	Chicago	Calgary	Differential
	(number of head)		(Canadian \$ per cwt)		
<i>1964 Period</i>					
May-June.....	390	3,440	22.73	22.98	-0.25
Oct-Nov.....	3,697	—	26.17	21.17	5.05
<i>1965 Period</i>					
Aug-Nov.....	6,458	—	28.49	23.92	4.57
<i>1966 Period</i>					
Mar-Apr.....	2,193	—	30.57	26.07	4.48
Nov-Dec.....	1,031	954	26.66	25.80	0.86
<i>1967 Period</i>					
Oct-Dec.....	748	1,546	28.41	28.23	0.18

¹ Over 700 pounds

SOURCE: *Livestock and Meat Trade Reports*, Various Issues, Market Information Section Production and Marketing Branch Canada Department of Agriculture.

floor". Expansion of output would lower the Canadian price by at least \$2.00 and probably \$2.50 per hundredweight relative to U.S. prices from the average relationship of recent years.

In recent years Canadian feeder cattle prices have been closer to a full scale "export floor" than have slaughter cattle prices. Expansion of exports would likely result in a decline from past average U.S. Canadian price relationships of about \$1.00 for Canadian feeder cattle and \$2.00 or more for Canadian slaughter cattle. These relationships together with the price effect of the higher tariff on feeder cattle indicate that trade patterns have given the Canadian feedlot operator a favourable position relative to his U.S. counterpart. In other words there has been a higher average fed cattle-feeder price differential in Canada than in the United States.

It is unlikely that our feedlot industry will find profitable markets for slaughter cattle or dressed beef in the United States on a consistent basis. Over the next two or three years Canadian feedlot operators will have to outbid U.S. buyers for feeder cattle and then compete on an export basis with their slaughter cattle. This would not appear to be a profitable situation.

*Where Will Canadian Feeder Cattle Be Fed?*¹⁴

Most of the feeder cattle will continue to be produced in the West. In 1968, 83 per cent of all beef cows were in the four western provinces

¹⁴ For further treatment of this question see the Canadian Agricultural Congress supplementary paper "The Position of the Canadian Beef Producer Operating on the North American Economy" March 1969.

(Alberta 37.1 per cent; Saskatchewan 28.7 per cent; Manitoba 11.2 per cent; British Columbia 5.6 per cent). Given the need to convert land from wheat to grass, the predominance of the West in feeder cattle production is likely to continue and even to increase. Location of feedlots, however is a different thing.

Because of severe winters Saskatchewan and Manitoba farmers will find it more difficult to develop feedlots in spite of their proximity both to feed and feeders. Quebec and the Maritimes are deficient in feed and also in the know-how of operating feedlots. Thus the main areas are likely to be Southern Ontario and South-Central Alberta, with considerable development also in British Columbia.

The price of Choice Steers in Toronto has averaged about \$2.00 per hundredweight more than in Calgary since 1960. Steers gaining 500 pounds, thus bring \$10 more per animal if fed in Ontario than fed in Alberta. Ontario producers have the important advantage that they produce corn silage and grain corn. Alberta feeders currently have the advantage of being able to buy non-quota grains at very low prices compared with the prices Ontario producers would have to pay for the same quality of grain (even after Feed Freight Assistance). This advantage to prairie feeders cannot be expected to persist indefinitely if the Task Force recommendations on feed grain marketing are implemented. Thus, both Southern Alberta and Southern Ontario will experience considerable growth in feedlot operations to meet the rapidly rising domestic demand.

World Projections

There have been several studies of projected world supply and demand for beef and all of them foresee growing shortages of beef and veal. As can be seen from Table 10 the expected deficit in OECD countries¹⁵ is expected to rise from 800,000 tons in 1961-63 to 3 million tons¹⁶ in 1980. Most of the projected deficit in beef and veal will occur in North America (primarily the U.S.A.) and will be met mainly by shipments from Australia, New Zealand and Argentina. These studies project rising world prices for beef. It is better to be associated with an expanding industry than one with stagnant markets and world over-production.

Grades and Grading

These subjects are under discussion at present by representatives of producers, the trade and government. The Task Force commends these groups for their attempts to improve beef grading which has long been in striking contrast to the excellent grading system for hogs in Canada.

Summary of Analysis

1. Per capita Canadian consumption of beef will be at least 100 pounds in 1980 and could be 110 pounds.

¹⁵ Canada, U.S.A., Japan and countries of Western and Southern Europe.

¹⁶ Canadian beef consumption in 1964-65 was about 800,000 tons.

TABLE 10
Projections of Beef and Veal Production, Consumption and Balance for Major Trading Nations

F.A.O.	1961-1963			1975 (low income)			1975 (high income)		
	Prod'n	Cons'n	Net Trade Exp. +, Imp. -	Prod'n	Demand	Net Trade	Prod'n	Demand	Net Trade
North America.....	8,196	8,848	-652	11,468	12,289	-821	11,840	12,701	861
E.E.C.....	3,570	3,854	-284	4,555	5,093	-538	4,760	5,398	-638
N. Europe.....	1,226	1,806	-580	1,504	2,121	-617	1,582	2,192	-610
Total all Importers.....	17,369	19,076	-1,707	23,789	26,438	-2,649	24,734	27,736	-3,002
Exporters.....	5,551	3,776	+1,775	7,159	4,955	+2,204	7,507	5,190	+2,317
Total of all Countries.....	22,920	22,852	+68	30,948	31,393	-445	32,241	32,926	-685

SOURCE: Monthly Bulletin of Agriculture Economics and Statistics, F.A.O., March 1968.

O.E.C.D. (O.E.C.D. Countries only)	1961-1963			1975			1985		
	Prod'n	Utiliztn.	Net Trade	Prod'n	Utiliztn.	Net Trade	Prod'n	Utiliztn.	Net Trade
North America.....	8,302	8,652	-368	10,878	12,244	-1,366	13,850	15,391	-1,541
E.E.C.....	3,671	4,114	-431	4,374	5,170	-796	4,924	5,894	-970
N.W. Europe.....	1,882	1,894	-9	2,073	2,115	-42	2,258	2,397	-139
S. Europe.....	593	587	-2	810	1,033	-223	1,039	1,372	-333
Japan.....	164	169	-5	242	346	-104	451	557	-106
O.E.C.D.....	14,612	15,416	-815	18,377	20,908	-2,531	22,522	25,611	-3,089

SOURCE: Agricultural Projections for 1975 and 1985, O.E.C.D., Paris 1968.

2. World demand for beef will continue to rise more rapidly than supply and world prices will be strong.

3. The export prospects for feeder cattle are excellent and very large numbers could be sold if Canadian prices were to fall by \$1.00 per hundred-weight relative to United States prices. If prices fell by between \$1.00 and \$2.00 per hundred the export market would be unlimited up to the capacity of Canadians to produce feeders.

4. There seems little point in counting on exports of low quality beef in competition with Australian beef except as a declining residual from dairy cow slaughter.

5. The export prospects for slaughter cattle are not encouraging since they would require a decline of at least \$2.00 and probably more per hundred-weight vis-a-vis U.S. prices. In the short run Canadian feeders face the dual squeeze that the prices of Canadian feeders have exceeded U.S. feeder cattle prices in 1969 and in order to export, Canadian fed cattle prices would have to decline all the way to the export floor, i.e. below prices in the United States.

6. The export prospects for high quality dressed beef are similar to those for slaughter cattle.

Policy Implications

Several serious farm problem areas and policy matters converge in a discussion of beef cattle production. First, there is the problem to do with at least 10 million acres of prairie land which the Task Force estimates must be removed from wheat production.¹⁷ Some of these can go to increased acreage of rapeseed and some can go to increased barley exports, given more flexible pricing than that of the Wheat Board in the past, but these two outlets are not likely to be enough to accommodate these surplus acres. A good portion of them can be diverted to tame hay, pasture and feeder cattle production.

Second, there is the problem of the continual *expansion* of improved acreage in the West by almost 1 million acres per year. Given the present surpluses of grain, continued expansion seems highly unwise¹⁸ yet it is promoted by ARDA programs, Wheat Board quotas, income tax exemptions and provincial government land-clearing programs. Along with the initiative of individual producers these factors have increased potential production in the form of expanding improved acreage. Because the export markets for rapeseed and barley have definite limits, further acreage expansion may be expected to take the form primarily of increased feeder cattle exports. If the estimate made earlier in this chapter is correct, 5.5 acres of extra prairie land would produce one extra feeder per year. This is in accord with a study

¹⁷ This figure of 10 million acres is the estimated reduction from almost 30 million acres in 1968 to almost 20 million in 1980. There should be an even greater reduction in 1970 to 1972 in the face of a projected carryover of one billion bushels on July 31, 1970.

¹⁸ An analogy would be with a person who tries to mop up the floor without turning off the tap.

done for the Task Force which concluded that for 100,000 feeder cattle exported, the amount of land utilized would be 500,000 acres—the equivalent of approximately 20 million bushels of barley.

Continued expansion in the acreage of improved land at the rate of 1 million acres per year and all used for feeder cattle, would thus imply 180,000 extra feeders per year. The Task Force does not think that 1 million extra acres will be improved each year and it recommends changes to ensure that this does not happen.

The Task Force has assumed that its recommendations in Chapter 5 Wheat, Feed Grains and Oilseeds will be sufficiently implemented that improved acreage (including tame hay and pasture) in 1980 will exceed that of 1966 by no more than 1.6 million acres. Projections as to use of land and number of acres appear in Chapter 10 of *Agriculture in 1980: A Materials Balance Approach*.

Third, dairy policy converges on the beef cattle industry. A considerable amount of the beef and veal consumed in Canada (much of it of lower quality) originates in dairy herds. The potential for considerably increased beef output by nominal dairy farms is very large in Ontario and Quebec, especially if fewer bob-calves were shipped shortly after birth from Quebec to New York. The Task Force is not, however advocating any wholesale change from selling bob-calves to raising feeders in Quebec. The possibility is there but achieving it will depend upon relative veal-feeder prices. The convergence takes a second form; if the present large dairy subsidies were to be reduced (as is recommended in Chapter 7) and if imports were permitted to increase gradually, many milk producers would convert to the production of feeder or slaughter cattle. Some observers claim that on a small farm acreage in Eastern Canada one cannot afford to leave industrial milk production in favour of cow-calf and feeding operations. This is probably correct but largely so because of the twin facts that milk production is heavily subsidized and protected whereas the alternative of cattle production is neither subsidized nor protected. From the national point of view it appears unwise to subsidize the production of milk, in which we are at competitive disadvantage internationally and thus attract resources away from beef production, in which we have cost advantages and export opportunities. To a considerable extent, milk and beef production are complementary in Eastern Canada and many farmers would find it desirable to maintain their dairy herds and produce beef from some of the offspring.

The fourth policy which converges with beef cattle production is that of international trade. The general objective recommended by the Task Force is to work toward an uninhibited continental market for grains, oilseeds, livestock and potatoes. It would appear to be in the best interest of both Canada and the United States to eliminate all existing tariffs and quotas on cattle, calves, beef and veal.

The results of all of these policies appear in Chapter 10, *Agriculture in 1980: A Materials Balance Approach*, in which rapid declines in dairy cow

numbers and wheat acreage are offset by increased exports of barley and rapeseed, increased domestic consumption of meats and the export of 500,000 feeder cattle per year to the United States. It is this latter subject which is particularly relevant here.

Changes in production from one product to another come about largely because of the views of producers concerning expected relative prices, costs and returns. If farmers are of the opinion that the prospects for profits in feeder cattle production are less favourable than in milk or wheat production there will be no increase in feeder cattle production no matter what the Task Force or any one else may say. This is as it should be. Thus if in the interest of improved productivity of resources and higher farm income, it is appropriate to try to increase feeder cattle production and to reduce milk and wheat production, then there are two sets of policies which can be employed.

First, some or all of the existing policies which favour milk production (price supports for butter and skim milk powder, direct subsidies for the whole milk used in manufacturing, embargoes on imports of butter and powder) or favour wheat production (Temporary Wheat Reserves Act and C.W.B. quota policy in particular) must be amended to reduce the relative attractiveness of producing milk and wheat. Second, new policies must be developed to provide positive encouragement to beef feeder production. Such policies include using some of the Canadian Dairy Commission funds and some of the funds devoted to the Temporary Wheat Reserves Act to provide adjustment grants to farmers who enter beef production. These are particularly important during the first two years or so required to establish a beef enterprise.

The Task Force commends the action of certain provincial governments which have decided to provide credit incentives to those farmers who convert from grain to grass and livestock production. However the maximum of \$6,000 under the Saskatchewan program seems undesirably low.¹⁹

There are a number of other developments which would operate in the same desirable direction. The Canadian Dairy Commission should work as closely as possible with various credit institutions to promote adjustment from dairy to beef; for a period of three to four years artificial insemination using beef bull semen might be subsidized by federal and provincial governments; the beef equivalent of the very effective Dairy Herd Improvement Associations should be developed in a number of provinces.

Beyond such assistance there is not much which can be done without prejudicing export markets. For example, if there were to be a production subsidy of \$20 or \$25 per animal raised to a specified weight, it is likely that competitors in the United States would object seriously to what might be termed unfair competition.

Some comment is necessary to meet the objections of those currently producing feeder cattle who may maintain that they would be discriminated

¹⁹ Livestock Loans Guarantee Act, of Saskatchewan which went into effect November 1, 1969.

against by such assistance to new or expanding producers. First, existing producers of feeders should also be eligible for assistance in reducing grain production in favour of livestock. Second, there already exist several forms of assistance to some cattle producers and not to others that a differential rate might right some of the current imbalance. Existing forms of assistance include government subsidies which meet the overhead of irrigation projects which produce forage and include also the setting of leases on range land owned by the state at levels far below their market value.²⁰

TABLE 11
Per Capita Domestic Disappearance, Output, Prices, Exports and
Imports of Pork, 1955-57 to 1968

	1	2	3	4	5
Year	Domestic disappearance per capita	Output	Prices Grade A Toronto	Exports	Imports
	(lbs.)	(million lb.)	(\$/Cwt.)	(million lb.)	
1955-57 (average).....	47.6	862.7	28.20	52.6	0.6
1958.....	49.4	973.6	29.13	63.5	1.7
1959.....	56.7	1,237.7	24.80	70.0	1.4
1960.....	52.6	988.0	24.75	67.7	17.1
1961.....	50.3	975.4	28.30	52.4	41.9
1962.....	50.1	784.6	29.60	47.9	35.6
1963.....	50.7	981.0	27.80	47.4	89.5
1964.....	51.8	1,060.1	27.30	54.0	53.8
1965.....	47.9	1,006.5	33.40	58.0	37.2
1966.....	46.9	1,014.3	35.90	48.5	28.3
1967.....	53.8	1,181.5	30.70	59.1	28.8
1968.....	53.6	1,181.3	30.80	60.8	38.5
1969 (estimated).....	49.8	—	—	58.0	61.0
1980 (projected).....	50.0	1,302.0	—	65.0	65.0

SOURCE: Livestock and Animal Products Statistics and Catalogue No. 32-220, D.B.S.
Projection 1980 from *Demand-Supply Projections*.

Hogs²¹

The major question to be addressed in this section is whether Canada can expect to become a major exporter of pork to the United States in future years. The answer to this question will be found partly in the levels of technology and efficiency of hog producers north and south of the border,

²⁰ In British Columbia in 1967, rangeland outside the Peace River area was leased for pasture at the rate of 41 cents per head per month. In the Peace River area, fenced and reserved range was leased for 50 cents per head per month and what was called "Cultivated pasture" for \$1.00. In that year grazing permits were issued for 188,000 cattle by the British Columbia Forest Service.

In Alberta 4.4 million acres were under lease in 1966 by the provincial Department of Lands and Forests. Rates varied from 75 cents in the south to 65 cents in the centre to 45 cents in the north, all per animal unit per month. An animal unit consisted of a cow and calf.

²¹ This section also draws heavily upon work done for the Task Force by Professor Marshall of the University of Guelph.

partly in the efficiency of hog packing plants and to a very considerable extent in the relative prices of feed grains (themselves influenced considerably by government policy). Before turning to this crucial question however, it is necessary to examine the industry analytically.

Per capita consumption of pork over the past eleven years has been amazingly stable with a high of 56.7 pounds in 1959 (a year of very low prices and heavy production) and a low of 46.9 pounds in 1966. (See Table 12, Col. 1) Table 12 also contains a projection that per capita consumption of pork in Canada will be 50 pounds in 1980. This projection deserves comment especially when consumption in 1967 and 1968 was almost 54 pounds. Professor Marshall expects that per capita consumption in 1980 is more likely to be 55 pounds than the 50 pounds The Task Force has used in its projections. He bases his prediction largely on the considerable amount of substitution to be found between pork and other meat. Prices of broilers fell rapidly during the period 1955 to 1961, reducing the consumption of pork as a result. Broiler prices now seem to have stabilized and this depressing effect on pork consumption will no longer be likely to apply to pork in the future. The price of beef fell in 1964 and 1965 (Table 2 of this Chapter) and this also tended to reduce pork consumption in those years. Per capita consumption of pork in the United States was 66 pounds in 1968.

The Task Force has continued to use the Demand-Supply Projections figure of 50 pounds of pork per person and has incorporated this projection into Chapter 10 containing the materials balance tables. Per capita consumption in 1969 is likely to be down considerably from that of 1968, and will likely be just under 50 pounds.

Stable exports of pork have been notable over the last decade (Table 12, Col. 4). Where else would one find a product whose exports had remained within the range of 47 to 70 million pounds per year over an eleven year period and yet whose production and sale has been almost completely on the free market over this period?

Variable imports are another feature of trade in pork products, largely between Canada and the United States (Table 12, Col. 5). In the absence of trade restrictions it would be unlikely that exports would be stable and imports highly variable unless there were considerable differences in the quality of the pork products exported and imported. This, indeed, has been the case. Canadian exports to the United States are primarily hams, back bacon and high quality bellies—all of high quality and bringing a price premium over the American counterpart products. Imports of American pork to Canada are not because of special quality but because of price.

Relative Canadian-American hog prices have an obvious effect on Canadian imports of pork, as shown in Table 13, but little apparent effect on the high quality specialty product exported to the United States. Canadian prices have not fallen low enough relative to U.S. prices to expand exports substantially; a sizeable expansion would come about only through price competition on the common cuts and not just for specialty products.

In the Canada Department of Agriculture "Outlook 1969" a weekly level of Canadian gradings of 157,000 hogs is identified as the level of output which currently satisfies Canadian demand and the consistent level of exports

TABLE 12
Exports and Imports of Pork; Toronto-Chicago Hog Price
Differential by Quarter 1963 to Jan.-Sept. 1969

	Exports to USA	Imports from USA	Toronto- Chicago Price Differential
	(product weight-million lb.)		(Can.\$)
1963			
Jan.-March.....	10.1	26.2	6.91
Apr.-June.....	9.7	24.4	3.74
July-Sept.....	11.3	13.8	3.81
Oct.-December.....	11.3	14.0	4.48
1964			
Jan.-March.....	11.4	12.8	4.83
Apr.-June.....	11.3	13.9	4.09
July-Sept.....	10.8	6.6	4.09
Oct.-December.....	11.2	8.5	4.50
1965			
Jan.-March.....	11.9	7.3	3.81
Apr.-June.....	13.6	4.8	.46
July-Sept.....	12.4	4.3	1.38
Oct.-December.....	11.5	6.0	1.00
1966			
Jan.-March.....	10.6	5.0	.95
Apr.-June.....	11.5	4.0	.47
July-Sept.....	8.9	5.0	-1.64
Oct.-December.....	10.7	10.0	2.37
1967			
Jan.-March.....	11.7	10.0	3.67
Apr.-June.....	13.6	7.2	.71
July-Sept.....	13.1	2.4	-.61
Oct.-December.....	12.5	4.4	1.27
1968			
Jan.-March.....	14.0	3.0	-.51
Apr.-June.....	15.0	2.6	-1.15
July-Sept.....	11.9	12.1	2.53
Oct.-December.....	10.7	16.5	4.78
1969			
Jan.-March.....	13.0	25.1	4.59
Apr.-June.....	14.8	22.4	—
July-September.....	9.4	7.7	—

TABLE 13
U.S. Pork Imports by Origin; Canadian Share of U.S. Imports
1960-1968

	Canada	Denmark	Nethlnds	Poland	Total	Canadian Share
	(million lbs. product weight)					(%)
1960.....	47.3	40.7	42.0	35.1	171.3	27.6
1961.....	44.7	46.2	42.0	34.7	173.7	25.7
1962.....	46.8	63.8	43.4	39.8	203.8	23.0
1963.....	45.9	71.0	42.9	40.0	210.5	21.8
1964.....	50.6	66.4	38.2	43.9	210.6	24.0
1965.....	54.0	85.2	46.2	52.9	262.3	20.6
1966.....	47.5	116.9	65.0	51.6	298.3	15.9
1967.....	54.8	102.3	74.6	57.2	306.9	17.9
1968.....	55.5	111.9	82.2	55.1	324.1	17.1

SOURCE: *Livestock and Meat Situation*, Economics Research Service, U.S.D.A.

to the United States.²² If Canadian output falls short of this level, the CDA authors observe that Canada enters a "net import position". The Task Force is not inclined to attach so much importance to a figure such as 157,000 hogs graded per week, since there is bound to be some part played by price in its effects on Canadian consumption.²³ However the concept is helpful and the figure of 157,000 provides a rough but useful rule-of-thumb.

Competition between Canadian and American producers is obviously direct and intense and it will grow with lower tariffs. The Canadian tariff on U.S. fresh pork was reduced from \$1.25 to 50 cents per 100 pounds in June 1969; the U.S. tariff on Canadian fresh pork was \$1.00 per 100 pounds to December 31, 1969; it will become 80 cents during 1970, 70 cents during 1971 and 50 cents per 100 pounds beginning on January 1, 1972. In contrast to cattle, in which trade is largely in live form, almost all trade in pork is in the form of cuts.

Canadian hog prices, at the farm level, are higher than American hog prices. In the three years 1966-68 the Canadian weighted average price exceeded the calculated average price in eight major U.S. markets by about \$2.00 per hundredweight of dressed pork²⁴ (both calculated in Canadian dollars). The higher price of Canadian hogs may be regarded as an advantage,²⁵ providing it involves producing a high quality product at approximately equal costs. If the higher price is merely the result of different supply and

²² Canadian Agricultural Outlook Conference 1969, CDA, Nov. 24, 25, 1969. Page 62. The 1969 edition was considerably improved over earlier years.

²³ For a figure such as 157,000 hogs per week to indicate the turning point exactly, per capita consumption in Canada would have to be constant. It has not fluctuated greatly, but is not constant (Table 12, Col. 1).

²⁴ "For 1966 to 1968 the National Average Weighted Price in Canadian dollars averaged approximately \$3.95 more than the average price at the 8 markets in U.S. dollars converted to a dressed basis using an arbitrary 75 per cent yield." Outlook 1969, p. 70.

²⁵ It is regarded as an advantage in "Outlook 1969", p. 69, 70.

demand factors north and south of the border then it may be a disadvantage. A definite advantage, however, is that there is a premium market for certain Canadian cuts (hams, back bacon especially) in the United States, whereas there is no such preference by Canadians for cuts from the United States. This advantage is, of course, closely associated with the higher prices in Canada and indicates the higher quality for some Canadian cuts. A second real advantage for Canadian producers is that they enjoy a grading and payment system considerably superior to that in the United States. When consumer preferences are reflected through the grading system to create price differentials at the producer level and when these grade and price differentials are clearly apparent to producers one has a highly desirable grading system. The Canadian system was superior to that in the United States even before the introduction of the new Index Grade producer and packer organizations and government, deserve credit for having produced a good grading system for Canadian hogs.

Canadian producers have suffered from two serious disadvantages in competing with U.S. hog producers and both concern the price of feed grain. The first disadvantage is the generally higher prices for feed which hog producers must pay relative to their competitors in the United States. These differentials arise out of the eight cent per bushel tariff on corn, the tariff on mixed feed and the Canadian Wheat Board policy of maintaining high prices for barley. The second disadvantage is the distorting effects that occur among regions from feed-freight subsidies which give advantages to Maritime producers relative to prairie producers, but which advantages are frequently far more than offset by the availability, on the prairies only, of over quota (CWB) feed grain selling at distress prices. A sound and efficient hog producing industry should have a minimum of dislocation arising out of distorted or panic pricing of inputs.

The September 1969 Quarterly Survey showed that the number of pigs on farms in Saskatchewan was up 26 per cent over the previous year. This, of course, is a direct reflection of the crisis situation in grain marketing. Increases and subsequent decreases, of that magnitude are totally inconsistent with a sound efficient industry and create expensive over-capacity in breeding stock, farm facilities and packinghouse facilities.

For the past 10-12 years there has been a great deal of attention paid to the question of vertical integration in hog and poultry production. The use of teletype systems of selling by producer marketing boards such as that in Ontario (which pioneered in this direction) has made vertical integration impossible between the producer and packer stages. The limited development of vertical integration in the Canadian hog industry compared with the United States may have had some adverse effects on production efficiency but these have been limited. The improvements in price formation and in making hogs available to all bidders has been favourable to efficiency.

Packing house operations become important when considering Canadian-American competition, because the product moves as cuts, not as live ani-

mals. Unfortunately there are no detailed studies which would yield information on the relative efficiency of packing plants north and south of the border.

To export or not to export? The question posed at the first of this section must now be faced. Can Canadian pork be sufficiently low cost that exports will be increased substantially? Expert opinion on this important question is divided. On the optimistic side are those experts who point out that so far as climatic differences between the United States and Canada are concerned, we have no disadvantage in producing hogs and we do have some disadvantages in producing cattle. Therefore produce hogs, especially given our advantages in quality products and in grading—both of which are not present in the case of cattle. Furthermore, so this argument goes, those Ontario farmers who produce corn and feed it to hogs, and those prairie farmers who do the same for barley and oats, can compete with hog producers in the United States.²⁶

Reaching pessimistic conclusions are those (such as Professor Marshall) who point out that it is easy for us to export our specialty high quality hams and bacon in total quantities up to 60-70 million pounds but that to increase exports greatly beyond that level would involve really substantial reductions in producer prices. The price reductions would have to be so great, they maintain, that many Canadian hog producers would give up hog production and we would return again to a balance not much different from recent conditions.

There is considerable support for this position. Referring to the fact that hog gradings in Canada were below those of the previous year for the 15 months to September 1969, the CDA Outlook 1969 rightly gave the cause as follows "The main reason for the decline in gradings in Canada was the level of hog prices in the last quarter of 1967 and the first half of 1968 . . . The price of Grade A hogs at Toronto averaged \$28.49."²⁷ The average price for 1966-68 was \$32.47, but when the price fell to \$28.50 production declined substantially.

Further evidence comes from Table 13 which indicates on a quarterly basis the stable flow of Canadian pork exports and the remarkably close relationship of volume of imports and differentials in price.²⁸ What is particularly relevant from Table 13 is that even when the Toronto price fell as much as

²⁶ I wish to be identified with this position. Defensible as stated above, it would apply more strongly if the Task Force recommendation respecting the development of a free market in feed grains (Canada vs. the United States and Eastern vs. Western Canada) were implemented. I do not accept the judgment that Canadian hog production would necessarily be unresponsive to price changes. The remarkable achievement of Denmark and the Netherlands in exporting to the United States (Table 13) is a result of efficiency in production and excellent market development and merchandising. Canada could surely exploit its advantages of higher quality hogs, feed grain surpluses, lower cost feed grains and less costly transport to the U.S. market. Alberta is as close to the rapidly expanding Pacific Coast market as much of the U.S. Corn Belt. Tariffs are low. Hogs should not be excluded from the Continental market concept which runs through most of the Task Force Report. We should not settle for the necessity of having a small, essentially domestic, hog industry. The current and prospective application of advanced production technology also argue against this. (David L. MacFarlane).

²⁷ Outlook 1969, p. 60.

²⁸ Data on an annual basis cover up the relationships. Even these raw data giving quarterly figures, not lagged for price changes, may be slightly misleading.

\$1.00 below the Chicago price (and therefore about \$3.00 to \$4.00 below the normal Toronto-Chicago spread) exports failed to increase appreciably. In other words, prices would have had to fall even more relative to American prices before substantial increases in Canadian pork exports would have occurred.

We estimate that for Canadian pork exports to expand considerably, Canadian prices would have to fall by about \$5.00 per hundredweight below the relationship they "normally"²⁹ have with U.S. prices. Canadian production costs show no signs of decreasing to that extent on a continuing basis. In other words, we cannot cut our costs sufficiently to expand exports greatly, but we will continue to export a specialty product even though our prices are high. Finally, there is an upper level beyond which our prices cannot go without huge imports from the United States. The data of Table 13 show that Canadian prices can rise to \$4.50 above American prices and fall at least to \$1.50 below. Kennedy Round concessions will reduce this range by about \$0.75 on each end. Given the economic relationships previously discussed Canada seems to have gained less by this particular tariff reduction than did the United States. Both countries appear to have gained less by negotiating a lower pork tariff than if they had negotiated lower cattle tariffs. One should not take each tariff concession in isolation, however, because each was presumably part of a package.

Imports of pork into the United States amount to about 3.0 to 3.5 per cent of U.S. domestic production. Canada's share of this import trade has fallen from 27 per cent in 1960 to 18 per cent in 1967 and 1968. Between 1960 and 1968 U.S. imports from Denmark almost trebled and from the Netherlands doubled. These are mostly canned hams, whereas Canadian exports to the U.S. are mostly fresh or frozen hams. We might expect to experience greater competition from European hams in the American and even the Canadian market in the future. Table 14 indicates recent trends in U.S. imports. It is a striking commentary on Canadian livestock production technology that Danish and Dutch farmers and agribusiness can capture a growing share of the North American pork market while Canadian farmers with unprecedented stocks of grain available seem unable to compete.

In summary then, the Task Force is of the opinion that Canada is unlikely to experience major changes in exports or imports of pork with the U.S., however recent developments indicate that there may be a substantial market for pork in Japan.

Consumption and Canadian production, will increase by perhaps 30 per cent between 1964-1966 and 1980. This means steady growth and will require efforts by researchers and farmers to reduce costs and to emphasize quality. But hogs cannot be regarded as a major answer to the question of what to do with prairie ex-wheat acres, or as a major alternative to dairy farming.

²⁹ The average price of Grade A's in Toronto exceeded the average of No. 1, 2, 3, medium weights in Chicago by Can \$2.33 per hundredweight dressed, 1964-1969.

POULTRY AND EGGS

Poultry and egg production has gone through revolutionary changes since the arrival of commercial broiler production technology in Canada in 1950. Dual-purpose breeds for meat and eggs have been replaced by specialized stocks for broiler and for egg production. Broiler, turkey and egg production have become specialized operations. Output has rapidly expanded, scale has increased tremendously, prices for poultry meat have fallen and the number of producers has declined drastically. Vertical integration has occurred in some phases and provinces and provincial producer marketing boards have attempted to control output by allocations quotas. The present state of this completely altered sector will be discussed in turn for each of the major segments.

Breeders

Poultry breeding is highly specialized. A handful of master breeders in the United States, plus one each in Canada for broiler and for egg breeding now supply most of the basic breeding stock in North America and much of it throughout the world. This breeding stock goes to franchised hatcheries (or to intermediate hatchery supply flocks which provide the hatcheries with hatching eggs). Hatcheries produce the commercial chick developed by the breeder, but cannot reproduce the basic stock.

Hatcheries

Hatcheries are franchised by breeders and are therefore loosely integrated by agreement or by contract. Integration may also take the form of the financing of pullet growing operations by breeders. But the extent of actual ownership of hatcheries by breeders is not very great.

Integration by feed manufacturers is more extensive. Feed companies own or control a large number of broiler and turkey hatcheries and also of poultry processing plants. There results a complicated system of contracts and vertical integration, with the hatcheries or processor initiating contracts with growers but often acting as agents of the feed companies. For example, in Ontario, hatcheries have long participated in broiler growing contracts and are involved (sometimes jointly with feed producers and poultry processors) in broiler integration, by quota ownership of about 10 to 15 per cent of the Ontario basic quota. Arrangements to secure chick supply to the grower and payment to the hatchery, are often made by the processor as integrator (often as the agent of the feed company), who agrees to make payment to the hatchery.

Hatcheries themselves have expanded into financing of pullet growers until the product is ready for market and into financing of egg producers until egg returns enable the latter to repay the hatcheries' loans. Chicks are also often grown longer by the hatcheries, instead of being supplied as day-old replacement chicks.

Hatcheries have had to adjust to the mass needs of the modern poultry and egg producing firms and have to be ready to supply large orders (e.g. of 20,000 chicks or more) at one time. In this process of scale expansion, the number of registered hatcheries has rapidly declined (e.g. in Ontario to one-third of the number in 1950), while output has quadrupled. The day of the small hatchery is almost over.

With high volume outputs and specialized facilities, hatcheries face problems of seasonality of hatch and variability of production. These will probably continue unless production of broilers, turkeys and eggs can be stabilized and marketing problems of the latter solved.

Chicken and Turkey Broiler Producers

Commercial broiler production began in Canada in 1950 after the loss of the British market for eggs in 1949. The loss of this market caused a sharp reduction in Canadian egg production, with its poultry meat by-products and opened the way for a Canadian broiler industry. Since 1950, production of broilers and turkeys in Canada has expanded greatly, the number of producers has fallen rapidly and their size has increased correspondingly.

Production of chicken and turkey broilers was introduced as a new form of production and has largely replaced the old dual-purpose chicken enterprises. Thus it has not been a question of the effects of vertical integration upon an established set of producers but the nature of the vertical links developed in the course of establishing a new set of producers. The old set of producers has been largely forced out of production, with resultant problems of losses of farm income and declining numbers of farms. The sectoral problems now to be discussed are those affecting the new set of chicken and turkey broiler producers.

From the start in this new set of enterprises, vertical integration has had an important place. At the very beginning, feed companies sponsored and assisted the development of broiler production with capital assistance, credit for feed and technical assistance and supervision of growers. As broiler production became large volume enterprises, chick supply and processing schedules became important and this led to contracts involving hatcherymen as well as growers and to the acquisition of broiler processing facilities by feed companies. In practice, the processors often arrange the contracts and schedules with growers and hatcheries and are thus regarded as the integrators but many processors are in effect feed company agents.

Integration through ownership of broilers or of broiler production facilities has not become nearly so widespread in Canada, except for Quebec, as it has in the United States. Whether due to the efficiency of totally integrated operations, or to the attempts by marketing boards in less integrated areas to maintain prices at higher levels, output from totally integrated regions is becoming increasingly competitive in other regions. For example, Quebec is supplying increasing numbers of chicken broilers to Ontario and turkeys have been imported in large volume at times from the United States. Table 14

shows the dramatic expansion which has occurred in Quebec chicken broiler production compared with Ontario. In 1957-1961 Quebec broiler production was 60 per cent of that of Ontario. By 1967 it had drawn equal and now it exceeds Ontario by 20 per cent. The interesting feature of this development is that Ontario producers have more than held their own in turkey, hog and beef production relative to Quebec. The answer, of course, is that the quota system of the Ontario broiler board has inhibited growth and turned over a substantial market to Quebec's integrated, low cost producers. This kind of thing must not be allowed to happen on a national scale, with the imports coming from other countries.

TABLE 14
Production of Poultry Meat in Canada, by Province, 1957-61 to 1969¹

	Average 1957-61	Average 1962-66	1967	1968	1969 ²
(thousand pounds eviscerated weight basis)					
<i>Chicken and Fowl</i>					
Canada.....	362,174	490,577	597,340	597,530	680,000
Prince Edward Island.....	2,029	1,114	943	685	1,000
Nova Scotia.....	10,243	15,611	17,986	17,343	20,000
New Brunswick.....	5,529	6,536	10,161	11,262	14,000
Quebec.....	86,912	162,496	215,801	221,442	260,000
Ontario.....	149,416	172,692	202,217	198,962	222,000
Manitoba.....	25,066	27,374	32,645	34,092	40,000
Saskatchewan.....	22,454	22,307	23,570	25,284	27,000
Alberta.....	33,476	44,610	50,729	45,371	47,000
British Columbia.....	27,049	37,837	43,288	43,089	49,000
<i>Turkey</i>					
Canada.....	116,238	171,069	207,639	200,372	202,000
Prince Edward Island.....	288	148	95	56	—
Nova Scotia.....	839	1,004	1,650	1,873	2,000
New Brunswick.....	638	813	1,909	883	700
Quebec.....	14,497	24,094	35,556	35,588	38,500
Ontario.....	42,103	82,241	100,506	99,192	103,000
Manitoba.....	16,844	20,528	19,849	17,775	15,800
Saskatchewan.....	17,809	15,312	10,751	9,846	8,700
Alberta.....	15,612	16,581	19,391	18,453	16,500
British Columbia.....	7,608	10,348	17,932	16,706	16,800

¹ Total production includes output not marketed through registered processing plants.

² Preliminary estimate.

SOURCE: *Canadian Agricultural Outlook Conference 1969*, p. 91

Competition from other provinces and from imports has made provincial supply management through provincial marketing boards extremely difficult. at the same time, rapidly expanding and uncontrolled supply has led to periodic gluts and distress prices throughout the 1960's. The question of supply management is therefore a crucial one for all Canadian broiler producers.

In the case of chicken broilers, where the product is generally sold fresh in ice packs and is therefore protected to some extent from outside competition due to the difficulties of transportation and storage, provincial supply is stabilized and quotas have acquired substantial monetary value. Criticisms have been made of provincial prices and quotas and market demand estimates, but the main criticism is that for one provincial marketing board to attempt to limit output when there are other nearby sources of supply merely results in giving up some of the market to imports. National marketing boards and supply management are considered in Chapter 12 on Marketing Boards.

Egg Producers

Egg production in Canada was combined with poultry meat production and also carried out as a widespread subsidiary enterprise until the egg market collapsed in 1949. Thereafter specialized egg production grew in importance, parallel with the growth in specialized broiler production.

Small-scale egg producers are being replaced rapidly by large-scale producers. Many of these small enterprises were subsidiary enterprises on mixed farms and their loss puts a further squeeze on low farm income. In 1966, 3.5 per cent of the farms with hens had 68.9 per cent of the hens, thus indicating the wide difference between the large-scale and small-scale producers and the potential for further decline in the numbers of egg producers. Similar tendencies exist for egg-grading and packing stations; in 1966 there were only one-third as many stations as in 1951.

The two main problems of egg producers are the rapidly declining number of producers and great instability of prices. These result from a situation in which

- (a) competitive supply is expanding with large increases in scale of operation and internal economies of scale,
- (b) the product is traded both inter-provincially and internationally and
- (c) demand is both stagnant over time and highly inelastic with respect to price.

Consumption and Market Prospects

It is likely that consumption of poultry meats per capita will continue to increase; in fact the Task Force has accepted the Demand-Supply Projection estimate of a 32 per cent increase between 1964-1966 and 1980. The increase in turkey consumption is expected to be particularly dramatic. The Task Force has made the big assumption that Canadian production of broilers and turkeys will be sufficiently competitive that, with the help of the existing tariff, all Canadian consumption can be supplied out of Canadian production. At this point it is by no means clear that this will be the case. Efficiency in scheduling and production in the United States has made such advances as to threaten Canadian markets in spite of the Canadian tariffs. This situation is in marked contrast to those of beef and pork, in the production of which Canadians are competitive without protection.

It is obvious that any move to manage supply which raises costs will not be in the best long run interest of this sector.

At the same time, it is desirable that growers have access to feed grain and protein supplements at prices as competitive as possible with those of poultry producers across the border. The Task Force proposal elsewhere to eliminate the tariff on corn (but to impose "value for duty" when U.S. corn prices fall below the U.S. price support level) would be a step in the right direction. A similar step is the Task Force recommendation to eliminate all tariffs on poultry production and processing equipment.

The Task Force is convinced that, given equal access to feeds and other inputs, with the existing tariff (two cents per pound live weight or five cents dressed) to compensate for the colder climate in Canada, Canadian producers can be fully competitive with their American counterparts.

The situation facing egg producers is less favourable in regard to markets. The Demand-Supply Projections indicate that per capita consumption will fall but that total consumption will rise only modestly. As to production and competition with foreign supplies, the same arguments and conclusions apply to egg production as to broiler and turkey production. There is no reason why egg producers in Canada cannot be as efficient as their counterparts in the United States.

RECOMMENDATIONS

1. Governments and producers should accept as a target the export of 500,000 feeder cattle per year by 1980 and the production of enough beef and veal to meet Canadian consumption demands in full. Federal and provincial programs of research, extension and credit should take this objective into account.

2. Canada should initiate discussions to remove *all* tariffs on cattle and beef in order to achieve a completely free continental market.

3. Dairy farmers in Quebec and Ontario (particularly in Quebec) should consider carefully the desirability of retaining calves which are now sold at low weights in order to produce heavier veal animals or feeders. Which of these alternatives should be followed will vary from time to time and will be determined by relative prices and the availability of other opportunities for income.

4. The Task Force commends the fact that discussions are currently underway concerning beef grading and recommends continuing review.

5. The Federal Government should direct some of the funds currently made available through the Temporary Wheat Reserves Act for payments to encourage diversion of resources from grain to cattle production.

6. The Canadian Dairy Adjustment Commission should include positive incentives for milk producers to move into beef production. These are discussed in greater detail in Chapter 7 on Dairy.

7. There should be no change in tariffs on poultry and eggs.

8. Tariffs on feed and on equipment used in producing and processing livestock and poultry should be eliminated. Details are given in the Appendix to Chapter 4, International Trade.

9. Any moves in the direction of National marketing boards for poultry or eggs must be scrutinized with the greatest care to ensure that it does not reduce efficiency. This subject was discussed in considerable detail in Chapter 12, Marketing Boards.

chapter seven

DAIRY

INTRODUCTION¹

The Canadian dairy industry is beset with problems, both natural and man made. Climatic conditions for milk production are less favourable in Canada than in most countries; per capita consumption of milk and milk products is falling in Canada as it is in most countries; even with a rapid increase in population Canadian consumption of milk in all forms is increasing only slightly; substitutes threaten fluid milk producers' markets, the devaluation of the British pound has reduced Canadian cheese exports; high support prices in many countries have led to a world-wide surplus of dairy products.

Federal dairy policies have supported manufacturing milk and cream prices by offers-to-purchase programs, by embargoes on virtually all dairy imports except specialty cheeses and by other forms of subsidization. To some extent these subsidies have slowed down adjustments. Support programs have provided seasonally stable prices but the year-to-year changes in dairy programs have created uncertainties for investment in the entire industry. Some milk producers use modern methods and technology in highly efficient operations but many are appallingly out of date.

There are about 110,000 manufacturing milk and cream shippers of whom about 78,000 ship less than 100,000 pounds of milk (equivalents) annually and about 21,000 fluid milk shippers of whom nearly all ship over 100,000

¹ This paper draws heavily with frequent unascrbed quotes from a study done for the Task Force "Canadian Dairy Policies" by B. B. Perkins, J. H. Clark and R. G. Marshall, of the University of Guelph.

pounds of milk.² Except for those small scale producers who have little alternative use for the few resources they devote to dairying and the largest scale producers (predominantly fluid shippers) who have attained substantial economies of size, dairy farmers have high costs. The dairy income problem revolves around those small and medium sized dairy farms whose operators have few alternatives either off-farm or on-farm and who have not managed to up-grade their milk production technology. Given their lack of modernization the majority of producers would not be able to cover their operating costs and obtain a return on their labour and investment in dairying if federal subsidies were significantly reduced. In such an event many producers who derive a large part of their income from dairying would face income problems varying in severity and duration with their farm and off-farm alternatives. Milk processing and distributing firms have serious problems too. Their numbers have fallen by one-third in six years (from 1,600 plants in 1963 to 1,100 in 1969) and of those remaining about one-third are so small as to have annual sales of less than \$250,000. Among both farms and milk plants there are wide differences in costs and use of technology and the smaller farmers, processors and distributors face serious financial problems.

Currently the Federal treasury costs of support programs for manufacturing milk and cream amount to \$125 million per year and the consumer costs (through higher dairy product prices) to about \$100 million. There are no developments in the offing which offer any prospect of improved incomes to producers. Indeed high prices for fluid milk are providing incentives for the use of substitutes which could erode dairy product markets.

This chapter attempts to do six things: first, to present a brief description of the structure of the milk producing sector indicating in particular the degree of relationship between rural poverty and dairying; second, to present some projections to 1980; third, to discuss problems within the processing sector; fourth, to comment on the implications of fluid milk substitutes; fifth, to explore the main issues and policies in the dairy industry; finally, to make a number of recommendations.

THE MILK PRODUCING SECTOR

In 1966³ about 190,000 farmers in Canada produced milk; almost one-half of the Census count of farmers had income from the sale of milk or milk products. The majority of dairy farmers were cream shippers with small operations. Cream shippers were a majority of the total in all provinces except for Quebec, Ontario and British Columbia (Table 2). Shippers of

² Many dairymen, especially in the Central Provinces gain substantial additional income from the sale of dairy cows and heifers to the United States. Sales amounted to \$12 million in 1967. As noted in the chapter on Livestock a very considerable number of veal calves are exported from Quebec and Ontario.

³ Because of rapid structural change in the sector one must pay particular attention to the year quoted. The 190,000 dairy farmers of the 1966 Census had shrunk to almost 130,000 at time of writing this Report.

manufacturing milk were numerically important only in Quebec, Ontario and Prince Edward Island. Not surprisingly, the number of fluid shippers varied roughly in proportion to the provincial population.

TABLE 1
The Distribution of Dairy Farms by Type of Shipper and Province, 1966

Province	Cream	Manufactured	Fluid	Total
Prince Edward Island.....	3,042	1,007	110	4,159
Nova Scotia.....	2,350	201	1,287	3,838
New Brunswick.....	2,847	428	720	3,995
Quebec.....	16,571	41,748	5,494	63,813
Ontario.....	15,466	22,203	7,525	45,194
Manitoba.....	15,803	716	1,234	17,753
Saskatchewan.....	23,453	12	776	24,241
Alberta.....	23,389	1,950	1,423	26,762
British Columbia.....	614	294	2,079	2,985
Total.....	103,535	68,559	20,648	192,740

SOURCE: Mackenzie, W., *Canadian Dairy Industry*, ARDA Project No. 15033, Canada Department of Forestry and Rural Development. Mackenzie's data for numbers of fluid shippers were adjusted by use of data from the 1966 Census of Agriculture. Mackenzie's data on manufacturing milk and cream shippers double counted about 7,000 producers who shipped both milk and cream. Since most of these shippers probably shifted from cream to manufacturing milk during the dairy year, it is primarily the number of cream shippers which was overestimated.

A vast majority of the dairy enterprises on Canadian farms are small. In 1966 at least two-thirds of the producers in the Maritimes and the Prairies shipped less than 48,000 pounds per year, which represents the output of about eight average cows and yields less than \$2,500 in gross returns per dairy enterprise (Table 2). Even in Quebec and Ontario fully one-third of the shippers were of this small size; only British Columbia was an exception and even then one-quarter of its shippers were of this size. The great majority of these smallest scale producers were cream shippers; the relative importance of cream shipping declines markedly with increases in output per farm. By contrast fluid milk shippers were heavily concentrated in the 96,000 pounds and over output class and almost none of them produced less than 48,000 pounds per year. Only Quebec, Ontario and to a lesser extent, Prince Edward Island had a substantial proportion of manufacturing milk shippers. These shippers were intermediate in scale of output between cream and fluid shippers.

Shippers of Fluid Milk

All provinces have legislation which provides for restricted entry into the fluid market but while prices received for quota sales are higher than those in manufacturing markets, fluid shippers must ship on a year-round basis and meet higher standards of milk quality. Because of the location, land and

labour costs are typically higher on fluid milk farms. These factors have resulted in above-average dairy farm managers who make fluid milk production a major enterprise. Appendix A to this chapter gives farm management data on a considerable number of dairy farms across Canada.

TABLE 2
Volume of Milk Shipped by Type of Shipper and Province, 1966

Province	Shipping Volume	Cream	Manu- facturing	Fluid	Total
	(lbs. milk equivalent per annum)	(per cent of all dairy farms)			
Prince Edward Island.....	under 48,000.....	54	14	(—)	69
	48,000–95,999.....	15	7	(—)	22
	96,000 and over....	4	3	2	9
	Total.....	73	24	3	100
Nova Scotia.....	under 48,000.....	55	3	4	62
	48,000–95,999.....	5	1	7	14
	96,000 and over....	1	1	22	24
	Total.....	61	5	34	100
New Brunswick.....	under 48,000.....	56	6	1	63
	48,000–95,999.....	12	3	3	18
	96,000 and over....	3	2	14	19
	Total.....	71	11	18	100
Quebec.....	under 48,000.....	18	23	(—)	41
	48,000–95,999.....	7	20	1	28
	96,000 and over....	2	22	7	31
	Total.....	26	65	9	100
Ontario.....	under 48,000.....	22	10	(—)	33
	48,000–95,999.....	9	12	1	21
	96,000 and over....	3	27	16	46
	Total.....	34	49	17	100
Manitoba.....	under 48,000.....	75	2	(—)	78
	48,000–95,999.....	12	1	(—)	13
	96,000 and over....	2	1	7	9
	Total.....	89	4	7	100
Saskatchewan.....	under 48,000.....	90	(—)	(—)	90
	48,000–95,999.....	6	(—)	(—)	6
	96,000 and over....	1	(—)	3	4
	Total.....	97	(—)	3	100
Alberta.....	under 48,000.....	69	2	(—)	71
	48,000–95,999.....	15	2	(—)	17
	96,000 and over....	4	3	5	12
	Total.....	87	7	5	100

TABLE 2
Volume of Milk Shipped by Type of Shipper and Province, 1966

Province	Shipping Volume	Cream	Manu- facturing	Fluid	Total
	(lbs. milk equivalent per annum)		(per cent of all dairy farms)		
British Columbia.....	under 48,000.....	18	4	(—)	23
	48,000–95,999.....	2	3	16	20
	96,000 and over....	(—)	3	54	57
	Total.....	21	10	70	100
Canada.....	under 48,000.....	43	11	(—)	54
	48,000–95,999.....	6	10	1	20
	96,000 and over....	2	14	9	26
	Total.....	54	36	11	100

(—) less than .5 per cent. Percentages do not add exactly to totals in some cases because of rounding.

SOURCE: see Table 1.

Data on over 750 fluid milk farms in Ontario indicate that in the mid 1960's the average cost per hundredweight of milk produced declined sharply up to 300,000 pounds per year but only modestly beyond that level. These data indicate that the minimum size for a viable dairy enterprise is 25 to 30 cows with an annual production of close to 10,000 pounds of milk per cow. Smaller enterprises can be expected to have considerably higher costs. In 1966 there were fewer than 3,000 fluid shippers who shipped less than 96,000 pounds (located mostly in Quebec and the Maritimes) but there were probably another 5,000 in the 96,000 to 192,000 class and both of these groups would have had higher costs and lower net incomes than the average fluid shippers. Production costs and technological improvements increase the size of fluid milk enterprise necessary to have a profitable unit and the smaller shippers will find it increasingly difficult to compete. As a class they are not considered to have had serious income problems and their adjustment out of the industry or into larger size operations is made easier by the opportunity in most provinces to sell their fluid quotas or to acquire additional quotas.

Shippers of Cream and Manufacturing Milk

A special survey of shippers of cream and manufacturing milk in 1966⁴ revealed that only 36 per cent of them derived one-half or more of their cash receipts from sales of milk and cream and that a similar proportion obtained less than one-quarter of their cash receipts from this source (Table 3). Moreover, even this degree of dependence is characteristic only of produc-

⁴ W. J. White and V. A. Heighton, *The Structure of the Canadian Manufacturing Milk and Cream Industry*, Canada Department of Agriculture, March 1968.

TABLE 3

Receipts from Sales of Milk and Cream as Percentage of Total Receipts on Farms Shipping Manufacturing Milk and Cream; Canada and Provinces, 1966

	Less than 25 %	25-49 %	50-74 %	75-100 %
	(percentage)			
Canada.....	37	27	19	17
Prince Edward Island.....	31	46	16	7
Nova Scotia.....	47	27	14	12
New Brunswick.....	30	36	21	14
Quebec.....	6	31	28	25
Ontario.....	25	28	22	25
Manitoba.....	58	25	9	8
Saskatchewan.....	77	16	4	4
Alberta.....	62	24	8	6
British Columbia.....	41	24	14	21

SOURCE: W. J. White and V. A. Heighton, *The Structure of the Canadian Manufacturing Milk and Cream Industry*, Canada Department of Agriculture, March 1968.

ers in New Brunswick, Quebec, Ontario and British Columbia. Quebec had the highest percentage of producers with at least one-half their income from dairy products (53 per cent); Ontario had the second highest (47 per cent). In the Prairie Provinces the great majority of producers derived less than one-quarter of their cash receipts from dairy products.

The special survey also showed that only 15 per cent of the producers with one to seven cow herds obtained most of their income from sales of cream and manufacturing milk (Table 4) but that dependence on dairy sales increased rapidly with increases in size of herd. This is as one would expect; in fact it emphasizes how small some producers are when the sales from seven cows or fewer produces over one-half of their cash income.

Sales per cow averaged just under 6,000 pounds from the enterprises shipping cream and manufacturing milk; sales in Saskatchewan averaged only

TABLE 4

Receipts from Sales of Manufacturing Milk and Cream as Percentage of Total Receipts, by Number of Cows Milked, Canada 1966

Number of Cows Milked	Less than 25 %	25-49 %	50-74 %	75-100 %
	(percentage)			
1 - 7.....	65	20	8	7
8 - 17.....	22	37	24	17
18 - 25.....	10	27	31	32
26 - 50.....	10	18	27	45
Over 50.....	11	11	24	55

SOURCE: As with Table 3.

4,084 pounds per cow. Low yields per cow help to explain low incomes from milk production. Nearly one-half of all non-fluid shippers milked by hand; only 36 per cent of producers uses artificial insemination; only 37 per cent had either a bulk or can cooler. The data of Table 5 tell the sad story of the low level of technology on most non-fluid dairy farms. These facts must be borne in mind when discussing future dairy policy.

TABLE 5
Levels of Dairy Technology: The Incidence of Modern Equipment and Practices
on Manufacturing Milk and Cream Enterprises, by Province 1966

Farms Using	Per cent of dairy farms									
	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Can.
Electric milking machines.....	42	30	51	63	74	21	14	41	47	54
Pipeline milker.....	5	1	5	2	5	1	x	2	4	3
Bulk Tank.....	1	x	2	13	12	x	x	2	10	8
Can Cooler.....	20	12	15	40	34	13	6	15	28	29
R.O.P. or D.H.I.A.....	14	4	7	7	7	4	4	4	7	6
Artificial Insemination....	72	52	41	24	59	35	26	35	64	36

* Less than one per cent.

SOURCE: W. James White, "The Adoption of Modern Dairy Practices," *Canadian Journal of Agricultural Economics*, Vol. 16, No. 1, p. 30.

Those producers who have small or medium sized dairy enterprises and do not have other enterprises to provide reasonable net farm incomes represent the hard core of the dairy income problem. To increase their dairy incomes requires both managerial skills and enough capital to enlarge the herd to at least 25 to 30 cows and output per cow to at least 9,000 pounds per year. This is not a feasible solution for the majority, given supply and demand conditions. Even since 1966, the year on which much of the analysis in this section has been based, large numbers have left the industry altogether. Between 1966-67 and 1968-69, 25,000 dairymen producing less than 50,000 pounds of milk went out of production and another 25,000 producers were cut off direct payments from the Canadian Dairy Commission and most of them presumably are no longer shipping milk or cream. It is not surprising that the rate of change has slackened in the past year.

Those producers who currently have quotas of 12,000 to 50,000 pounds are less dependent on dairy income than the shippers sampled in 1966. Over 50 per cent of these small producers derive less than one-quarter of their income from milk and cream sales (Table 6); three-quarters of them derive less than one-half of their income from dairy sales. One-tenth of all these quota holders had year-round off-farm employment and nearly 20 per cent had some off-farm employment.

TABLE 6
Number of Farmers with Quotas of 12,000 to 50,000 Pounds by Per Cent of
Farm Cash Receipts from Dairy Products, Canada, 1968-69

Region	Less than 26%	26-50%	51-70%	More than 70%	Total
Maritimes.....	842	1,020	661	625	3,148
Quebec.....	1,788	2,164	2,258	3,200	9,410
Ontario.....	2,402	1,477	656	877	5,472
Prairies.....	16,317	3,516	1,118	1,142	22,093
British Columbia.....	77	52	24	39	192
Canada.....	21,486	8,229	4,717	5,883	40,315

SOURCE: Unpublished Canadian Dairy Commission data; distributions adjusted for about 3,000 shippers who did not provide income information.

To quote from the conclusions of the Perkins Study done for the Task Force.

1. Much of the primary dairy sector is characterized by poor management, archaic technology and small scale enterprises but the majority of producers with such enterprises do not depend on them as a major source of income and the dairy enterprise makes use of pasture, labour and building resources which have low opportunity costs (i.e. low returns in the next best use, such as producing beef or other livestock.) However in much of Quebec and in marginal farming areas in other provinces, low output dairy enterprises make a significant contribution to the relatively low total incomes of farm families. Moreover on most enterprises shipping between 50,000 and 150,000 pounds milk equivalent, production cannot be based on otherwise under-utilized resources and production costs are high. The demands of the medium to large dairy enterprise limit the ability of the operator to take off-farm employment.

2. The rate of structural change in the sector has been extremely high and we do not expect that this rate of change will abate. In our estimation there are currently no more than 15,000 producers shipping less than 50,000 pounds who are experiencing serious income problems.⁵ In addition, there may be up to 25,000 larger shippers who are facing income problems but generally less severe problems. Among cream shippers there is a marked trend to convert to shipping whole milk or quit dairying and we expect that cream shipping will virtually disappear during the 1970's, with the possible exception of Saskatchewan.

The estimate of 40,000 milk producers "facing problems" out of 110,000 non-fluid shippers may be low. In the Chapter "The Low Income Sector", it is estimated that a minimum of 100,000 farm families were living *below the poverty line* in 1966 and it could well be that at least one-half of them are milk producers.

⁵ "There are approximately 19,000 shippers in this class in the current dairy year who have depended on sales of milk and cream for more than 25 per cent of their farm cash income. Allowing for off-farm employment earnings and other sources of family income (including pensions and income received by other members of the farm family) the estimate of 15,000 producers in this class in poverty was considered a reasonable upper limit." (Part of quote from the Perkins Study).

PROJECTIONS TO 1980

Projections as to future consumption of milk in all forms depend upon the assumptions made and type of analysis used. Two forecasts were made for the Task Force. The study by Perkins forecast an increase of nine per cent in total Canadian consumption in the 15 years 1964-66 to 1980; a Canada Department of Agriculture⁶ study forecast a 14 per cent increase in the same period. The main source of this fairly modest discrepancy arises from differences in the treatment of Two-Percent fluid milk. The rate of market growth of Two-Percent sales has been rapid; in Toronto it accounted for 11 per cent of total fluid milk sales in 1958 and for 37 per cent in 1967. As a proportion of all commercial sales of fluid milk in Canada, Two-Percent milk accounted for 15 per cent in 1964 and 24 per cent in 1967. In provinces east of Ontario it was ten per cent or less in 1967, while in other provinces it ranged from 19 per cent in Saskatchewan to 34 per cent in Ontario.

The Perkins estimates appear in Table 7. They indicate that between 1964-66 and 1980 per capita consumption of milk in all forms will decline by 18 per cent but that total consumption will rise by nine per cent because of population growth. Cheese consumption by 1980 is expected to be more than double that of 1964-66 but total consumption of other milk products will fall. To the dairy farmer and indeed to many milk processors, this is a depressing but nevertheless realistic forecast.

The Perkins report projections of supply appear in Table 8, based on the assumption that current policies would continue to 1980. Between 1963 and 1969, the number of milk cows in Canada declined by 11 per cent and output per cow rose by 9 per cent. These data must be treated with caution: "Milk cows" may be defined quite arbitrarily; "output per cow" and "sales per cow" are not identical. The unfavourable comparisons of Canadian output per "milk cow" with that of milk cows in other countries may be partly because of different interpretations as to what constitutes a "milk cow."

THE PROCESSING-DISTRIBUTING SECTOR

The processing-distributing sector of the Canadian dairy industry in 1966 consisted of almost 1,300 factories or plants owned by nearly half as many companies. They employed about 33,000 persons and had a total "value added" of approximately \$350 million. A large part of the sector is still made up of small local fluid milk distributors and of companies processing butter or cheese in small single plants. Large scale and multiproduct plants, operated

⁶ "Supply-Demand Projections to 1980," CDA, 1968. In this publication, consumption in all forms was forecast to be 19.9 billion pounds compared with the forecast of 18.8 billion in Table 7. Because consumption of butter (the main form in which milk is consumed) varies considerably with price, one must make his assumptions explicit as to price. If butter prices remain at 1969 levels (relative to margarine only) per capita consumption in 1980 might be 15 pounds rather than 13.1 (Table 7). This higher figure would account for 1.1 billion pounds of milk, or exactly the difference between the CDA and the Perkins forecasts.

TABLE 7

Per Capita and Total Consumption of Dairy Products, 1964-66
1967, and Projections for 1975 and 1980, Assuming Constant Real Prices

Per Capita Consumption in Pounds of Products	1964-66	1967	1975	1980	1980 as per cent of 1964-66
(pounds)					
Fluid milk ¹	275.0	267.5	246.0	233.0	84.7
Butter.....	18.5	16.9	14.0	13.1	70.8
Cheese.....	9.0	9.9	12.8	14.4	161.1
Other milk products ²	114.4	114.5	102.8	99.6	89.4
Total Consumption in Milk Equivalents	1964-66	1967	1975	1980	1980 as per cent of 1964-66
(million pounds)					
Fluid milk ¹	5,263	5,325	5,703	5,943	115.3
Butter.....	8,372	7,933	7,773	7,973	95.2
Cheese.....	1,714	1,971	2,945	3,653	213.1
Other milk products.....	2,178	2,337	2,438	2,594	119.1
Total ³	17,230	17,149	17,809	18,831	109.3

¹ Includes fluid milk sales and milk consumed on farms; excludes Newfoundland population. Cream included in other milk products.

² In milk equivalents.

³ Adjusted to avoid double counting sales of Two-Percent milk and the butterfat separated off in preparing the product. Adjustment in terms of millions of pounds of whole milk amounted to: 297 (1964-66), 416 (1967), 1,050 (1975), and 1,332 (1980)

SOURCE: Perkins.

TABLE 8

Projected Changes in Milk Cow Numbers, Yield Levels, and Milk Sales
by Regions, 1975 and 1980

Region	Cow numbers			Sales per cow			Milk Sales		
	1964-66	1975	1980	1964-66	1975	1980	1964-66	1975	1980
	(000's)			(lbs.)			(million pounds)		
Atlantic.....	149	109	100	5,504	7,300	8,000	820	796	800
Quebec.....	1,047	935	873	5,510	7,300	8,200	5,769	6,826	7,159
Ontario.....	935	817	776	6,807	8,400	9,200	6,367	6,863	7,139
Manitoba.....	169	83	68	4,715	7,500	8,200	798	622	558
Saskatchewan.....	175	45	34	4,114	7,100	7,800	720	320	265
Alberta.....	260	147	125	5,363	8,300	8,800	1,393	1,220	1,100
British Columbia.....	86	77	72	9,356	11,100	11,700	805	855	842
Canada.....	2,822	2,213	2,048	5,909	7,909	8,722	16,672	17,502	17,863

No allowance is made in this series for the overestimation of sales in the period 1964-66 due to double counting of Two-Percent milk.

SOURCE: Perkins.

by major corporations which sell a wide range of dairy products and have their own brand names are integrating the sector across product lines. The degree of concentration in the sector is increasing markedly. Apart from the fluid milk distributors, which in size and number vary largely in proportion to the distribution of population, the processing sector is located mainly in Ontario and Quebec. Nearly three-quarters of all processing plants are in Quebec and Ontario and these provinces account for a similarly large proportion of total sector sales.

The regional distribution of plants classified according to the processing product differs considerably. Of the 545 butter plants operating in 1965, 35 per cent were in the Western provinces and 60 per cent in the Central Provinces, whereas of the 202 cheese factories, 92 per cent were located in Ontario and Quebec. Condenseries and processed cheese plants were also heavily concentrated in the Central Provinces, while ice cream manufacturing, which is commonly associated with the pasteurizing operation, was more widely distributed across the country.

In 1965 average output of butter per plant was 264,000 pounds but ten per cent of the plants produced 40 per cent of the butter. The decline in farm-separated cream production has forced small local creameries either to go out of business or to collect cream from a wider geographic area, thus increasing their costs. Offer-to-purchase programs for skim milk powder in the 1950's and again in recent years have favoured combined butter-powder plants over creameries and there has been a rapid structural change from creameries to industrial milk plants receiving whole milk. Today most butter is made from whole milk. Recent studies have indicated that processing costs fall rapidly (per unit) with increased output. A synthetic model employed in a study undertaken for the Canada Department of Industry indicated that processing costs alone declined from 8.9 cents per pound for creameries with an output of 250,000 pounds to 5.2 cents for creameries with an output of 1 million pounds of butter. For plants using whole milk, the processing costs allocated to butter production were estimated to decline 5.4 cents per pound at an output of 750,000 pounds to 2.5 cents at an output of 4 million pounds.⁷ Above an output of 700,000 pounds it was estimated that cream processing would result in higher unit costs than whole milk processing.

A study in Alberta based on the operations of plants in 1966 revealed similar substantial economies of size; plants with less than 200,000 pounds output had average processing costs of over 11 cents per pound of butter, whereas plants producing more than one million pounds had unit costs below five cents.⁸ The study provided the interesting information that the small creameries through competition for supplies paid more per pound of butterfat input than the larger butter plants.

⁷ *Economies of Scale in Canadian Butter and Skim Milk Powder Production*, a study undertaken by Stevenson and Kellogg Ltd., for the Canada Dept. of Industry, 1967.

⁸ Walter B. Rogers and Horace S. Baker, "An Economic Analysis of the Alberta Butter Industry," *Canadian Journal of Agricultural Economics*, Vol. XVI, No. I.

Much the same conclusions about economies of size in butter manufacturing were drawn in a recent Quebec study.⁹ This study also found that the investment costs required to receive cans were much higher than those required for bulk receiving. In the case of cheese, the Quebec study indicated that economies of size, though evident, were much less marked in cheese made from raw milk than in butter production. Processing costs per pound averaged 7.2 cents for plants with less than 200,000 pounds output and 6.3 cents for plants with output of 600,000 pounds and over.

Changes in technology and industrial structure have favoured large volume plants. New forms of packaging and merchandising and changes in competition arising out of the development of the retail food chains have had a direct impact on the number and size of these processing firms. Condenseries, process cheese plants and the larger ice cream plants, which typically have been operated by major corporations with wholesaling operations, are faced with countervailing power of the retail chains.

The development of retail chains has had an important impact on fluid milk distributors most of which were typically small firms serving local markets, generally through home delivery routes. The retail chains have offered consumers lower prices for milk and other dairy items and a greater choice of container sizes. Competition at the retail level has been heightened by the emergence of milk specialty stores in many major cities which, by means of high volume sales and longer store hours, offer milk in two and three quart jugs at lower prices. The large capital requirements for modern pasteurizing and bottling plants, the need to meet the demand for diversified sizes and types of containers and types of products and the bargaining strength of the supermarkets which are accounting for an increasing proportion of their sales have combined to put great pressure on dairies to expand their businesses or to sell out to other distributors.¹⁰

The degree of concentration in the ownership of dairy plants in Ontario (which "is less than in any other province, except perhaps Quebec"¹¹) has increased considerably in the post-war period; the "Big Three" (Silverwoods, Bordens and Dominion Dairies) accounted for 30 per cent of sales of fluid milk, cream and chocolate drink in 1945 and for 35 per cent in 1961; more significantly, over the same period, the number of independents required to account for 15 to 20 per cent of total sales declined from about 55 to 12 firms. Many independents were acquired by or merged with larger dairies.

Current trends indicate that in the long run the processing-distributing sector will be completely integrated, producing most of the range of dairy

⁹ Gilles Lebel and Armand Lacasse, *Economic Study of Manufacturing Costs of Dairy Products in Quebec*, 1967.

¹⁰ The ultimate threat posed by the retail chains to the dairies is that the former will integrate back into the processing field as Loblaw's has done in Ontario and as Safeway has done in the West. Such integration along with growth in independent jug stores could result in the traditional dairies losing their markets altogether. Some large dairy companies have entered the jug store markets themselves.

¹¹ See Duncan Allan's excellent paper, "Concentration and Competition in Ontario's Fluid Milk Industry," *Ontario Economic Review*, November 1965.

products and operated by a small number of large corporations and co-operatives. At the present stage the degree of competition is high and margins low.

In 1957, the Royal Commission on Price Spreads of Food Products found no evidence that the rate of return on net worth in this sector was abnormally high. A similar conclusion can be drawn from data for 1963 which indicate that the profit on net worth after tax for corporations manufacturing dairy products averaged 9.5 per cent and was below the average of other types of corporations. A Task Force survey of agribusiness produced similar conclusions for more recent years.

When provincial milk boards administer retail prices¹² they effectively determine the marketing margin for fluid milk products. It is likely that these margins are set to cover the costs of the least efficient distributors and thus serve to reduce price competition and to encourage advertising and other forms of promotion of questionable value to consumers and producers. The most obvious instance of such provincial protection is in Alberta where identical store and home delivery prices for fluid milk products prevent consumers from having the option of lower prices through store purchases. The existence of fixed margins for distributors provides considerable incentive for backward integration by chain stores into this field.

There has been a similar problem in Ontario for manufacturing milk products. In 1968 the Canadian Dairy Commission publicly stated that it viewed a price of \$3.54 per 100 pounds of manufacturing milk as the producer level equivalent of the support prices of 63 cents and 20 cents for butter and powder respectively and that it was up to the provinces to secure this manufacturing milk price. The Ontario Milk Marketing Board was the only provincial authority to fix a price of \$3.54 for manufacturing milk and by this action it effectively set the margin for processors. Processors with high operating costs have undoubtedly found this margin too low, whereas the more efficient processors may be able to gain profits which would not exist if margins were determined by market competition.¹³

Federal price supports for dairy products have undoubtedly reduced short-run uncertainty for processors and to this extent the support programs have lowered processing costs. On the other hand the Federal programs have increased processing costs because seasonally stable prices encourage seasonal instability of milk and cream production, which in turn results in excess plant capacity throughout most of the year and in higher costs for processing. By contrast, the year-to-year vagaries of Federal dairy programs have been a source of uncertainty for plant planning and investment. Federal and provincial policies have contributed to heavy investment in butter-powder plants in recent years. The current costly surplus of skim milk powder is a result.

¹² In the Prairies, Quebec and parts of the Atlantic region.

¹³ This corresponds to the position taken by G. R. MacLaughlin, Chairman of the Ontario Milk Marketing Board who argues "...our processing industry for industrial milk is behind the times... Ontario processors maintain they need a gross margin of at least 75 cents per cwt.... However, in some other areas of Canada and the northern United States, 40 cents to 50 cents is accepted as a satisfactory gross margin." Reported in Ontario Milk Producer, Nov. 1969.

FLUID MILK SUBSTITUTES

Substitutes for *fluid milk* (i.e. regular whole milk) are either (1) *filled milk*, a product that contains non-fat milk solids in either fresh skim milk or reconstituted skim milk combined with a vegetable fat in place of milk fat or (2) *synthetic milk*, a product in which no component of natural milk is used.¹⁴ Because of lack of experience with the marketing of either filled or synthetic milk in Canada, the Task Force is limited to an analysis of experience in various states of the United States and to conjecture concerning developments in Canada. Appendix B to this chapter gives considerable detail concerning the American experience. In this section¹⁵ we merely summarize some of the findings discussed in Appendix B and then go on to assess the possible implications of filled and synthetic milks to the Canadian dairy industry and Canadian dairy policies.

Filled and Synthetic Milk in the United States

In the United States, the only fat used in both filled and synthetic milk is coconut oil, which has more saturated fatty acids than butterfat has. A survey of consumers in California and Arizona indicated that over half of those interviewed were of the mistaken opinion that filled milk contained less cholesterol than did regular milk and an even larger proportion held the mistaken belief that there were fewer calories in filled milk than in regular milk.

Through its Federal Milk Orders, the United States Department of Agriculture has insisted that the non-fat milk solids used in filled milks be paid for at Class I (the highest) prices. A study by USDA indicated that the cost of ingredients, per U.S. half-gallon, would be 27.2 cents for regular fluid milk, 20.7 cents for filled milk and 13.0 cents for synthetic milk. Several other studies gave rough confirmation to these differentials (See Appendix B of this chapter). Filled or synthetic milks have been sold in at least 20 states but only in Hawaii and Arizona have they taken over a substantial share of the market (Hawaii, 20 per cent, Arizona, 10 per cent). In Hawaii the retail price of filled milk is about 20 cents per half gallon (U.S.) less than that of regular fluid milk. The ability of filled and synthetic milks to take over part of the fluid milk market is not merely a matter of their price differentials compared with fluid milk. Promotional activities, length of time the new products have been available to consumers, and misconceptions about relative calorie and cholesterol contents, may be as important as the actual price differentials. In the United States, many states prohibit or regulate the sale of filled milk but few states have barriers to the production and sale of synthetic

¹⁴ Synthetic milk may contain sodium caseinate, a milk derivative, as an ingredient. However, in the United States the Food and Drug Administration considers sodium caseinate as not falling within the meaning of dairy products as defined by the Filled Milk Act.

¹⁵ This section and Appendix B are drawn largely from work on the subject of milk substitutes done for the Task Force by Professor Marshall of the University of Guelph.

milks. Perhaps more important, the Filled Milk Act of the Federal government prohibits inter-state commerce in filled milk but not in synthetics. This Act is likely to be challenged in the courts and the whole legislative-administrative position for both filled and synthetic milks is in a state of flux.

Assessment of the Possible Impact of Fluid Milk Substitutes in Canada

A discussion of the market development of fluid milk substitutes and their impact on the Canadian dairy industry can proceed only after making assumptions concerning legal and administrative restraints and relative ingredient costs of the competitive products involved.

(a) Legal and administrative restraints

Most provinces have legislation or regulations prohibiting the blending of ingredients of dairy origin with those of non-dairy origin although in some provinces these restraints are ambiguous and subject to different interpretations.¹⁶ The Ontario Edible Oils Act and the Quebec Dairy Products Act both seem to prohibit the manufacturing and sale of filled products. Changes in provincial legislation would be necessary before filled milk could take over very much of the fluid milk market.

Synthetic milk seems to be in the same position as does margarine in terms of provincial legislation.¹⁶ Some provinces prohibit the manufacture and sale of substitutes but with exclusions made for individual products such as dessert toppings or coffee whiteners. Others permit the manufacture and sale of synthetic products under license. Although existing federal legislation does not prohibit the manufacture and sale of synthetic products, a restraint rests with the Federal Food and Drug Directorate pending their approval and development of nutritional standards.

(b) Relative ingredient costs in Canada

Various estimates have been made of the relative ingredient costs of filled, synthetic, and fluid milk in Canada. These are, of course, based on assumptions concerning the pricing of solids-not-fat and regular milk, the butterfat differential and the prices of non-dairy ingredients. In general, prices of the non-dairy ingredients in filled and synthetic milk are higher in Canada than in the U.S. and the butterfat support level lower. Skim milk powder prices are similar in both countries. If skim milk used for filled milk is priced at Grade A or Class I prices, the fact that the Canadian butterfat differential is lower than in the United States would raise the value of the solids-not-fat component in Canada relative to that in the U.S.A.

The Ontario study¹⁷ cites the ingredient costs of regular fluid milk at 15.47 cents per qt. (at \$6.00 per cwt) as compared to 13.12 cents per quart for filled milk using Grade A skim (8.05 cents per quart using skim milk

¹⁶ See *The Impact of Edible Oil Products on the Dairy Industry*, Farm Economics, Statistics, and Co-operatives Branch, Ontario Department of Agriculture and Food, June, 1968, Pages 5, 7, 35, 36.

¹⁷ *The Impact of Edible Oil Products on the Dairy Industry*, *op. cit.*

powder) and 9.36 cents per quart for synthetic milk. Perkins¹⁸ estimated the ingredient costs of filled milk (using liquid skim) at 11.71 cents per quart and of synthetic milk (using soya flour) at 5.27 cents per quart.

Table 9, which indicates the relative cost of ingredients in the United States and Canada, has been constructed from the U.S.D.A. study previously cited (with U.S. costs converted to an imperial quart basis) with particular assumptions concerning relative ingredient costs in Canada. One assumption is that the non-fat component of filled milk would be priced at Class I or Grade A prices; this is a reasonable assumption given the present milk control legislation in the different provinces.

TABLE 9
Estimated Ingredient Costs for Filled, Synthetic and Regular Fluid Milk in Canada

	Filled Milk Using Class I or Grade A Fluid Skim Milk		Synthetic Milk		Whole Milk	
	U.S.	Canada	U.S.	Canada	U.S.	Canada
(Cents Per Imperial Quart)						
Fluid Skim ¹	9.26	10.58	—	—	9.26	10.58
Vegetable Oil ²	1.65	1.88	1.65	1.88	—	—
Milk Fat ¹	—	—	—	—	7.32	6.75
Protein (soy Protein) ²	—	—	3.47	4.16	—	—
Emulsifiers, Stabilizers.....	1.71	1.71	1.71	1.71	—	—
Sweeteners, body agents.....	—	—	1.09	1.09	—	—
Cents per qt.....	12.62	14.17	7.92	8.84	16.58	17.33

¹ Based on a fluid price of \$6.56 cwt. (3.5%) with a butterfat differential of 74 cents in Canada and on a fluid price of \$6.35 US/cwt. with a butterfat differential of 80 cents in the U.S.A.

² Assuming prices of vegetable fats and soy proteins 20 per cent higher in Canada than in the U.S.

SOURCE: Data for U.S.A. converted from Table B-2 (Appendix B of this chapter); data for Canada estimated by R. G. Marshall.

Pricing the non-fat component at powder prices would widen the cost differential between regular milk and filled milk by approximately four cents per imperial quart.

Other influences in Canada could be: (1) the possible application of a 12 per cent federal sales tax to filled and synthetic products (there is currently a 12 per cent federal sales tax on margarine) and (2) the fact that partly skimmed milk, offered at a price lower than regular milk, has become more widely accepted in Canada than in the United States. The latter would tend to narrow the price advantage of filled or synthetic milk.

¹⁸ *Canadian Dairy Policies Appendix IVA*, p. 152.

Policy Implications of Milk Substitutes

(a) Filled milk

Assuming that legal and administrative barriers to the manufacture and sale of filled milk are removed or circumvented in particular provinces and assuming that the pricing of the solids-not-fat component of filled milk falls under provincial jurisdiction with respect to classified pricing, then the price differential between regular fluid milk and filled milk will depend upon two policies: (1) federal price support policies concerning butterfat and (2) provincial policies on the pricing of solids-not-fat. The latter might be set by the provincial milk administrative body at regular fluid skim prices, or alternatively, manufacturers might be free to use skim milk powder at market prices. These would be set currently by the offer-to-purchase level. High butterfat prices and low solids-not-fat prices would increase the differential between regular fluid milk and filled milk and expand consumption of the latter.

(b) Synthetic Milk

Policy implications concerning the completely synthetic product are of a somewhat different order. Again assuming technological improvement with respect to taste and other product attributes and assuming that nutritional and composition standards are established such that a relative cost advantage still accrues to the synthetic product, displacement of fluid sales by a non-dairy product presents a threat to both provincial classified pricing arrangements and to federal dairy policies.

The implications concerning displacement of dairy resources, the loss of revenue from fluid milk sales, the restraints on the level of prices for Grade A milk and the added burden of disposal of manufacturing milk products are self-evident. In addition, although future developments in this regard are, as yet, completely hypothetical, should legislative and administrative restraints on the production and sale of synthetic milk (e.g. outright prohibition, taxation, restrictive composition and labelling regulations) not be imposed or prove to be ineffective, the competitive price level of solids-not-fat as established at both provincial and federal levels could be completely undermined.

In the projections of Chapter 10 we have assumed that fluid milk substitutes would have minimal impact by 1980. However there is potential for substantial change and this assumption could be entirely too optimistic from the point of view of the milk industry.

THE PRESENT SITUATION—A SUMMARY

There does not appear to be any great advantage to be gained from duplicating here a detailed review of the dairy policies of the past few years; the Perkins study for the Task Force reviewed them in some detail to

1968-69. Instead, we shall attempt to put the present situation into perspective and in doing so also put current dairy policies into perspective and then indicate promising approaches in policy.

Consumption and Promotion

Per capita consumption of milk in all of its forms has been falling for many years and there appear to be no likely developments which would reverse that trend. On the other hand it might easily be speeded up by filled or synthetic milks or by larger butter-margarine price differentials. In the export market it appears that only cheddar cheese offers any prospect of exports and these prospects are tied almost entirely to the United Kingdom market. Devaluation of the pound sterling in 1967 affected the market adversely; entry of the UK into the EEC is likely to bring even more unfavourable effects. Thus dairymen, like wheat producers but in contrast to beef producers, face gloomy prospects on the demand side.

Fluid Milk Producers

There are about 20,000 fluid milk producers mostly with large dairy enterprises and specializing in milk production (other enterprises, if any, are minor).

The prices these farmers receive for the milk they sell for fluid consumption (about 70-90 per cent of their production) is much higher than for industrial milk because of provincial government regulations. These regulations, along with the high cost of hauling fluid milk for long distances, give fluid milk producers such a favoured (monopoly) position that they apparently require no further government assistance.

The fluid milk producers affect the industrial milk sector by producing in excess of market requirements for fluid milk. They gain from the offer-to-purchase programs of the Canadian Dairy Commission by receiving the local equivalent of 65 cents per pound for butter and 20 cents per pound for (spray) skim milk powder.¹⁹ They can receive CDC direct payments subsidies but only on their output in excess of 125 per cent of their fluid milk sales.

The differential between fluid milk prices and industrial milk prices increases the gross revenue of milk producers as a whole for any given level of production. This is one of the two-price systems discussed in Chapter 12 on Marketing Boards.

The negotiability of fluid milk quotas in British Columbia and Ontario and the use of an organized system of pooling have brought an increased level of order and understanding to fluid milk production and marketing in those provinces.

¹⁹ The question of "hold-backs", which have become sizeable is ignored. These are sums held back to assist in subsidizing exports of dairy products. In 1969-70, the hold-backs amount to 26 cents per hundredweight on quota milk and 52 cents on non-quota milk. Export subsidies on skim milk powder and cheese are expected to amount to about \$45 million in 1969-70, about double the sum collected in hold-backs. Thus hold-backs may have to be increased.

The favoured position of fluid milk producers is threatened by substitutes but substantial adverse effects should not be experienced before 1972 at least.

Fluid Milk Distribution

The number of distributor firms has been falling rapidly, partly because of the economies which accompany larger operations and partly because of relaxation in the regulations by provincial governments' regulatory agencies. There is, fortunately, a tendency to reduce those parochial influences which prevented expansion and amalgamation of firms. The process of amalgamation must include co-operatives as well as corporate enterprises. Some provinces continue to establish farm-consumer margins.

Far-reaching changes are coming about in kinds of containers, in dairy-retail vertical integration and in multi-product operations and these should not be discouraged by provincial regulations.

Federal Government Subsidies

In 1969-70 the Canadian Dairy Commission operates an offer-to-purchase program for butter at 65 cents per pound and for skim milk powder (spray) at 20 cents per pound.

These prices:

- (a) should allow plants to pay \$3.60 per hundredweight of milk,²⁰
- (b) keep domestic production and consumption of butter in balance or with a very slight surplus of production,
- (c) encourage farmers to sell whole milk rather than cream,
- (d) encourage processors to expand butter-powder facilities and to contract creameries,
- (e) produce a surplus of 220 million pounds of powder in 1969 (production 380 million, consumption 160 million pounds).

The data of Table 10 indicate that the major cost of the dairy subsidy has been through direct payments which in 1969-70 amount to \$1.25 per hundredweight. This payment is made on most industrial milk²¹ and cream. In the past year the rapidly rising cost of the powder price support has made price support operations almost as important as the direct subsidies. Funds are shifted to the price support operation by substantial "hold backs" retained by the CDC from the direct payments.

The treasury payments for dairy programs far exceed those provided to any other sector of agriculture and now approach \$1,000 per shipper of cream or manufacturing milk per year. Compared with these subsidies the Temporary Wheat Reserves Act (\$35 to 65 million), Feed-Freight Assistance Act (\$20 million), ARDA and other agricultural programs appear small.

²⁰ This price is realized in Ontario but the price in other provinces is normally lower.

²¹ Paid only for milk and cream for which the producer has a CDC subsidy eligibility quota. There are a number of CDC rules concerning minimum and maximum outputs which are eligible for subsidy and concerning transfer of subsidy eligibility quotas. There are also regulations concerning hold-backs. (see Footnote 19)

TABLE 10
Total Treasury Costs of Dairy Programs, Canada, 1962-63 to 1969-70

	1962-3	1963-4	1964-5	1965-6	1966-7	1967-8	1968-9	1969-70
	(thousand dollars)							
Direct payments ¹	58,796	45,133	38,229	44,597	93,861	98,229	101,105	88,700 ⁴
Differ to purchase losses ²	3,223	2,922	3,014	664	1,443	4,784	4,941	7,000 ⁴
Export subsidization....	2,838	876	1,005	2,541	7,770	10,153 ³	30,902	47,000 ⁴
Total.....	64,857	48,931	42,248	47,802	103,074	113,236	136,948	142,000 ⁴

¹Includes all direct subsidies

²Losses for 1965-6, 1966-7 and 1967-8 include estimates of losses on end of year inventories.

³Total export subsidy fund including any unused portion which would be paid as a direct subsidy bonus to producers.

⁴Canadian Dairy Commission estimate. Other years do not include allowance for program administration costs.

SOURCE: Annual Reports, Agricultural Stabilization Board and Canadian Dairy Commission.

The Crisis in Skim Milk Powder

The bigger the CDC losses on powder, the less is available for its direct subsidy program, since the CDC budget is fixed. Losses on powder are growing rapidly and this trend cannot be reversed without a drastic reduction in powder price supports. This might slow down the trend from cream shipments to whole milk shipments but will not reverse it.

In order to bring powder supplies into balance with demand, milk production would have to decline by as much as 2.5 billion pounds, which might then involve butter imports of up to 100 million pounds per year. In other words we now find ourselves in one of these awkward situations of joint-product output in which one of the products is in vast over-supply. We continue to buy powder at 20 cents per pound, store and transport it and sell it to non-Canadian users at five to eight cents per pound. With production of 380 million pounds and consumption of 160 million, the outlook is indeed serious and deteriorating.

Protection

While direct payments from the treasury are the largest form of subsidy to milk producers, they are not the only one. Embargoes on the importation of all important milk products except for specialty cheeses resulted in Canadian consumers paying about \$100 million more in 1967 than would have been the case if imports had been permitted without tariffs. This calculation is by no means clear-cut. Column 4 of Table 11 shows one way of calculating the consumer cost of price supports for butter; the price differential between Canadian and New Zealand butter (in London) is multiplied by Canadian consumption and the consumer cost shown to be \$77 million in 1967. This calculation assumes that we could have imported our entire requirements without affecting the New Zealand prices (or at least world market prices); this overstates the consumer cost because such an increase in imports would have strengthened world prices. This calculation also assumes constant con-

TABLE 11
 Producer Protection and Consumer Cost of Dairy Supports Butter 1950-67

Year	1st grade, Montreal	New Zealand finest, London	Montreal price as % of London	Montreal price less London price multiplied by Canadian domestic disappearance
	(c per lb.)	(c per lb.)	%	(\$millions)
1950.....	56.9	21.8	261	107.5
1951.....	62.6	28.0	264	102.9
1952.....	61.6	30.6	201	92.8
1953.....	60.0	37.1	162	70.2
1954.....	59.3	44.8	133	45.2
1955.....	58.9	44.4	133	46.1
1956.....	57.5	38.5	149	62.7
1957.....	59.5	35.2	169	81.8
1958.....	63.1	28.6	221	112.6
1959.....	63.6	41.1	155	71.2
1960.....	63.5	38.6	164	75.4
1961.....	63.0	33.5	188	88.7
1962.....	54.9 (62.9) ¹	40.2	137 (156) ¹	48.8
1963.....	50.8 (62.8)	44.0	115 (143)	24.6
1964.....	51.8 (63.1)	45.2	115 (140)	24.2
1965.....	54.3 (63.9)	44.9	121 (142)	34.3
1966.....	59.0 (62.0)	40.7	145 (152)	65.2
1967.....	62.5	40.0	156	77.5

¹ Based on support prices to producers. Other subsidies served to reduce wholesale and retail market prices between April, 1962 and March, 1965.

SOURCE: *Dairy Statistics*, D.B.S. Cat. 23-201, and data supplied by the Canada Department of Trade and Commerce.

sumption in Canada, whether of Canadian butter at 62.5 cents or New Zealand at 40 cents per pound and this assumption causes understatement of consumer cost. Given the present and prospective dairy surpluses in Western Europe it appears that Table 11 understates the size of the consumer subsidy in recent years.

To the consumer cost of butter embargoes must be added those for cheese (estimated by Perkins at \$10 million in 1967) and skim milk powder, making a total of about \$100 million in 1967. Let us be clear on one point concerning subsidies whether they come from the treasury or by way of trade protection—subsidies are not to be condemned merely because they are subsidies. If they were, of course, almost all government action would stand condemned because one way or another almost every industry and person received some form of direct or indirect subsidy from government action. The important questions are not “Are they subsidies?” but “Are the purposes of the subsidy of high priority?” Who benefits and by how much? Are benefits worth the cost? and “Are the methods of subsidizing the most effective way to achieve the desired goals?” It appears that the present program of the Canadian Dairy Commission cannot meet the test imposed by these questions.

If the purpose of the subsidies is to expand or strengthen an industry in which Canada has a competitive advantage over other countries, then manufactured milk products are obviously the wrong commodities to have chosen. If the purpose is to provide a larger income for those with very low incomes, then the dairy subsidy program is an extremely expensive and inefficient way to do so. If the purpose is to promote adjustment among producers, then the CDC policy of opposition to trade in subsidy eligibility quotas has been undesirable. If the purpose has been to strengthen the processing-distributing phase then provincial and federal policies have been spotty—some good, many bad. Finally if the purpose has been to create an industry capable of withstanding the threats of fluid milk substitutes and of offsetting a continuing decline in per capita consumption, the results do not appear particularly favourable.

Industrial Milk Producers

There are about 110,000 producers of cream and industrial milk. While some of these are efficient low-cost producers, the majority are so small and have adopted so few of the modern techniques available that the industrial milk producing sector cannot be described as a modern, efficient part of Canadian agriculture. Canadian industrial milk producers could not compete with producers in New Zealand, Australia, Denmark and the Netherlands, partly at least because of climatic disadvantages, but also because of technological factors (See Table 5 above). Compared with producers in France and West Germany and much of the United States, Canadian industrial milk producers compare fairly well. Yet it is not greatly encouraging to be able to say that one is at least as good or perhaps better than those who are lowest on the scale. Thanks largely to her policy of subsidization the EEC has a dairy surplus of unpleasant proportions. In fact the world surplus of dairy products is almost as serious as that of wheat especially when one considers the more difficult storage problems involved. World prices for butter and powder may be as distorted by subsidies as are wheat prices.

The basic question facing those connected with the dairy industry in Canada is "Are we to continue to rely upon protection and subsidies to remain self-sufficient in milk production?" This assumes, rightly, that any thought of exporting dairy products without substantial subsidies would be a non-starter (except for our best cheddar cheese). In the case of milk production the notion of a continental market (U.S.-Canada) is neither particularly appealing nor likely, and would have fewer benefits for both sides than would free trade in livestock, feed, oilseeds and manufactured inputs. An open U.S. market for Canadian cheddar cheese would be attractive but it is perhaps unrealistic to anticipate any rapid and substantial opening of the U.S. cheese market just as it is for the Canadian butter market.

The number of producers has declined very rapidly in recent years, with an estimated decline of 55,000 shippers in two years. In 1968-69 the Commission initiated its first major move toward quota reallocation by granting larger quotas to about 37,000 shippers of whom the great majority had had quotas

in excess of 50,000 pounds. The increment in quota which they received was equal to the excess of their shipments over their quota in 1967-68 up to a total quota limit of 300,000 pounds. In 1969-70 the maximum quota eligibility was increased to 400,000 pounds for one individual and to 700,000 when several persons own the dairy enterprise. The minimum quota is 12,000 pounds for existing shippers and 100,000 pounds for new shippers.

The Poverty Problem Among Milk Producers

To the extent that dairy programs have been implemented to improve the incomes of many poor farmers, current subsidies (which are proportional to market sales) are an indirect and inefficient means of dealing with the problem of rural poverty. Low income farmers are much less closely associated with dairying than they used to be and the Dairy Commission now places little emphasis on poverty problems as a rationale for its policy. Nevertheless, a significant proportion of industrial milk and cream producers would face serious income problems without present subsidies.

As discussed in Chapter 16, the Low Income Sector, it may well be that when all farm and non-farm alternatives for a 55-year-old low-income milk producer have been considered, the most desirable course for him and for the economy would be for him to remain more or less as he is in milk production. This would probably not be the case for younger men and certainly not for their children. As we have suggested in Chapter 16, perhaps the best course is for him to make a few minor changes and for ARDA to stand prepared to purchase his farm (and lease back the house) when he can no longer operate it.

Efficiency in Processing Industrial Milk and Cream

The number of dairy processing and distributing plants declined from about 1,700 in 1961 to 1,300 in 1966 and probably to about 1,100 in 1969—a rate of decline paralleling that among producers. A great deal more consolidation is necessary. The major issue here is whether federal and/or provincial governments should be taking an active role in promoting consolidation through grants, “forgiveable loans” and low interest loans, or whether provincial governments in particular should remove those regulations and institutions which have prevented the full impact of competition among processors and distributors. There can be little doubt that costs vary greatly among plants.

Federal-provincial Jurisdiction and Responsibilities

Federal-provincial relations become more involved in the dairy industry than in any other sector. Provincial governments take responsibility for fluid milk pricing, quotas and pools and the Federal government operates price or income subsidies, import controls and export promotion and subsidies. Both programs affect the other. Responsibility for dairy policy cannot be compartmentalized precisely among federal and provincial jurisdictions. The required

co-operation among government agencies responsible for dairy policies includes consultation on policy formulation, consistency among programs and removal of inequities arising out of discrimination between fluid and other milk shippers. In the latter regard, provincial governments should undertake to establish regional price pools for grade A milk and provide non-fluid shippers with the opportunity of entry into such pools providing they meet quality standards. Manufacturing milk shippers transferring into the pool under this program should be permitted to continue receiving direct payments on their federal quota subject to the same restrictions as other fluid shippers and all fluid shippers should be permitted to purchase federal quotas.

The long term objective of the Canadian Dairy Commission is, according to the Act, to provide efficient producers of milk and cream with the opportunity of obtaining a fair return for their labour and investment. Obviously, a great deal depends upon the criteria for "efficient" and "fair return". The Chairman of the CDC has also enumerated two related objectives. One is rationalization of the industry, which is generally interpreted to mean the improvement of its productivity and efficiency so that it can become increasingly self-sufficient. The other is to tailor the production of dairy products to the requirements of our normal markets.²²

The Atlantic Provinces

Regional impacts of national policies always provide important and controversial issues and never more so that in the Atlantic region. The present policy of the Dairy Commission seems to create adverse effects in parts of the Maritimes where a large proportion of milk is sold as fluid milk, a considerable amount as cream and only very small amounts for manufacturing into butter and skim powder. With CDC rules concerning the eligibility of fluid shippers for federal subsidies and with only small amounts qualifying for the direct subsidies, some officials in the Maritimes feel that some exceptions should be made in the application of national policy. Since special rules have been created for provinces in which there are pooling arrangements (British Columbia and Ontario) there are precedents for some regional flexibility in C.D.C.'s policy.

The Milk Industry 1980

In this chapter we propose fairly drastic treatment for the dairy industry between 1969 and 1976. The result would be an industry of lower output, lower costs and vastly fewer problems. We anticipate that the number of milk cows, which has been falling steadily from 3,006,000 in 1957-61 to 2,668,000 in 1967 to 2,584,000 in 1969 will have declined to 1,667,000 by 1980. Production per cow has been rising for years and we anticipate that it will reach 9,000 pounds by 1980. This would be a tremendous achievement and one of which everyone concerned with the dairy industry could be proud.

²² Address to Dairy Farmers of Canada, January 1969.

If these projections prove correct and there were 1,667,000 milk cows averaging 9,000 pounds per cow, total Canadian production would be 15 billion pounds of milk. Consumption in Canada may be about 19.9 billion in 1980 and thus imports of butter would be required. There seems no likelihood of imports of skim milk powder or cheddar cheese by 1980, but specialty cheeses will undoubtedly continue to be imported. The consumption estimate is based on the assumptions that filled and synthetic milks will be of minimal importance and that the 12 per cent tax will continue to apply on margarine.

These changes in the dairy industry should produce a much trimmer, more advanced industry. Compared with the findings of Table 5, which shows the astonishingly low level of technology used (36 per cent of industrial milk producers using artificial insemination, 37 per cent with coolers of any kind etc.) the milk producing sector will be viable in 1980.

RECOMMENDATIONS

1. The Canadian Dairy Commission should be renamed the Canadian Dairy Adjustment Commission. Its objective should be to assist milk producers to adjust their dairy enterprises so that the latter become profitable without extensive subsidies *or* to assist milk producers who have little prospect of financial success as dairymen to phase out of milk production and into other operations with the least possible personal and social dislocation.

2. The C.D.A.C. and provincial regulatory bodies must provide the kind of economic climate for processors and others involved in the dairy industry so that marketing efficiency may be improved. Such measures include:

- (a) Programs to bring about more stable milk production, especially seasonally,
- (b) Ending those regulations that inhibit the expansion and merger of processors and distributors.

3. The C.D.A.C. should announce its general programs at least five years in advance including ranges of prices or physical targets to provide flexibility in the later years. Quota policies and payments should be made explicit for a five-year period in order to allow rational planning and action.

4. The C.D.A.C. should revise its subsidy eligibility quota policy as follows:

- (a) All holders of quotas should be offered a cash payment and if they accept, their quotas should be retired by the C.D.A.C. A payment of two or three times its current annual value is suggested.
- (b) All quotas not retired by purchase should be made openly negotiable. There should be no upper limit to the amount of quota held by any one producer. The lower limit should be raised from the current 12,000 pounds to 30,000 in 1970-71 and progressively higher in subsequent years. This program should be announced in early 1970.

- (c) The unit value of direct payments should be reduced progressively so as to disappear in 1976. The unit values per year and the terms under which quotas may be held and exchanged should be announced during 1970 for each year until they are phased out in 1976.
- (d) The objective should be for C.D.A.C. to be out of its present subsidy programs by 1976.

5. The C.D.C., which has been buying skim milk powder at 20 cents per pound and exporting it at five to eight cents, should make powder available to livestock feeders at prices competitive with substitute ingredients. Presumably the C.D.A.C. would have to denature the powder by using a harmless vegetable dye and thereafter might sell it at prices close to those net prices currently received in export markets.

6. No public funds should be made available (with or without subsidy) for the expansion of skim milk powder processing facilities until the serious oversupply of powder has been overcome. Economic opportunities are available, however, for the production of specialty cheeses and limited assistance for initiatives in this direction should be considered.

7. Some of the funds currently made available to the C.D.C. should be used by the C.D.A.C. to provide positive encouragement for dairy farmers who wish to enter beef cattle production. These would take the form of adjustment grants during the two years or so required to establish a beef operation. Other assistance might take the form of temporary subsidies for artificial insemination by beef breeds. The principle here is the same as that enumerated in Chapter 5, Wheat, Feed Grains and Oilseeds in which the Task Force recommends that funds currently used under the Temporary Wheat Reserves Act should be used to promote adjustment from wheat production to forage. In addition, there are some areas in which assistance to dairy farmers who have profitable opportunities in cash crops would be justified.

8. The level of price supports for butter and cheddar cheese should be continued at current levels for several years but the offer-to-purchase level for skim milk powder should be reduced progressively each year until it is considerably closer to international prices. Since per capita consumption of butter in Canada is responsive to price, some of the reductions in expenditure on skim milk powder might be used to reduce the price of butter to consumers through a deficiency payment. It appears that the result of all of these adjustments could be a shortfall in butter production relative to consumption at prices to farmers of about 65 cents per pound. If this occurs the Task Force recommends that the C.D.A.C. stabilize the price at about 65 cents per pound by importing butter and selling it at 65 cents. The profits so derived should be used to promote adjustment in the industry or out of it.

9. Other provinces ought to give serious consideration to adopting the fluid milk quota systems (including methods of transferring quotas) currently followed in Ontario and British Columbia.

10. Provincial and regional milk marketing boards should discuss with provincial departments of education the feasibility of initiating school milk programs in certain municipalities. A national policy concerning school milk programs is ruled out on constitutional grounds.

11. All provinces should abolish resale price control on milk.

12. Increased emphasis on programs such as milk recording (perhaps by Provincial Marketing Boards) and mastitis control is desirable in order to reduce costs of production at the farm level. Many Canadian milk producers are extremely efficient, using their resources skillfully and keeping abreast of scientific developments related to their industry. There should never be any doubt raised in the minds of such people that they contribute productively to the well-being of the nation. It is a great responsibility for provincial extension specialists, for credit agencies, for marketing board officials and for the C.D.A.C. to ensure that more farmers move into this elite of low cost efficient operators and that facilities and information be provided to keep them highly productive. Recent trends have been in the right direction, with rapidly increasing output per enterprise. Expansion of bulk hauling and raising of milk quality standards will speed this desirable trend; those without milk coolers have little place in a modern industry. The dairy industry has a number of years of rapid transition ahead of it and the speed of transition should remain almost that of the last three years.

APPENDIX A

TABLE A-1

Costs and Returns on Fluid Milk Farms, by Province

	Nova Scotia ¹ 1965	Quebec		Ontario		Saskatchewan		Alberta		British Columbia 1967
		1966	1967	1966	1967	1966	1967	65/66	66/67	
Number of farms.....	99	86	118	207	118	28	13	51	61	140
Cows per farm.....	24.4	28.0	35.1	33.1	35.1	29.4	32.2	44.8	44.0	28.0
Milk sold/cow (lbs.).....	7,276*	8,755	9,759	9,077	9,759	9,664	10,472	9,452	9,847	9,229
<i>Income per cwt. sold</i>										
Milk.....	5.14*	4.74	5.28	5.28	5.59	5.66	5.67	4.74	4.93	4.79
Livestock credit.....	.66	.67	1.10	1.10	1.27	.95	1.04	.66	.81	.43
Total.....	5.80	5.41	6.38	6.38	6.86	6.61	6.71	5.40	5.73	5.22
<i>Expenses and net returns per cwt. sold</i>										
Feed and other direct.....	—	—	3.81	3.81	3.61	3.15	3.26	3.32	3.27	2.71
Gross margin.....	—	—	2.57	2.57	3.25	3.46	3.45	2.07	2.47	2.51
Labour charges.....	—	—	1.20	1.20	1.19	1.71	1.57	1.15	1.08	1.75
Contribution to overhead ²	—	—	1.37	1.37	2.06	1.75	1.88	.92	1.39	.76
Dairy investment/cow.....	—	—	942	942	1,056	1,087	975	717	776	789
Contribution to overhead as % of dairy investment.....	—	—	13.2	13.2	19.0	15.5	20.2	12.1	17.6	8.9
Aver. total farm investment.....	27,865	37,044	59,646	59,646	75,114	99,343	102,171	97,037	95,700	57,708
Aver. net farm income.....	3,196	5,656	5,329	5,329	8,763	14,524	14,278	8,019	7,832	4,368

¹ Not exclusively fluid milk farms.

² Includes dairy overhead plus return to management.

* Estimated.

SOURCE: Nova Scotia Department of Agriculture & Marketing; Ministère de l'Agriculture et de la Colonization Québec; Ontario Department of Agriculture and Food; Saskatchewan Department of Agriculture; Alberta Department of Agriculture; Canada Department of Agriculture.

APPENDIX B

EXPERIENCE IN THE UNITED STATES WITH FILLED AND SYNTHETIC MILKS¹

(a) *Composition and characteristic*

According to a United States Department of Agriculture publication² *filled milk* is defined as a "product made by combining fats or oils other than milk fat with other milk solids and the resulting product is in semblance of milk" and "*synthetic or non-dairy milk* . . . would be made with a combination of fats or oils other than milk fat combined with other food solids, excluding milk solids."

In most instances the only fat used in filled and synthetic milk is coconut oil, a fat source low in polyunsaturated fatty acids, although a combined soybean and cottonseed oil relatively high in polyunsaturated fatty acids has been used. Filled milk also contains a "basic mix" consisting of emulsifiers, stabilizers in a few cases, and body agents. The major non-fat ingredients in the completely synthetic product are protein—usually sodium caseinate although a soy protein isolate has also been used—emulsifiers, buffers, stabilizers, body agents and sweeteners. Both products may also contain added vitamins, minerals, and coloring agents.

Nutritionally, it appears that there are only minor differences in the major nutritional elements of natural milk between filled and whole milk. However, Table B 1, indicates that synthetic milk, in the form marketed in the United States over past months, is deficient in major nutrients particularly protein and calcium. Another study indicated a complete absence of riboflavin in synthetic milk.³

Estimates have been made that a nutritionally equivalent synthetic milk would have little or no ingredient cost advantage over the filled product depending on the pricing arrangement for the solids-not-fat component in the latter product.⁴ A Michigan State University study also indicated that to raise the protein content of synthetic milk would cost approximately 1.5 cents for each percentage point (.1 per cent) increase per half gallon.

Studies indicate that regular and filled milk are not significantly different with respect to flavour and palatability. A consumer survey conducted by

¹ This appendix is a somewhat edited version of a memorandum prepared for the Task Force by Professor R. G. Marshall, Department of Agricultural Economics, University of Guelph. Professor Marshall visited a number of American centres in January, 1969 on behalf of the Task Force to obtain up-to-date information on milk substitutes. Along with Professor Perkins (project leader) and Professor Clark of the University of Guelph, Professor Marshall also helped to produce a major report "Canadian Dairy Policies" for the Task Force.

² *The National Food Situation*, Economic Research Service, U.S.D.A., November 1968, p. 28.

³ *The Relative Nutritional Value of Filled and Imitation Milk*, Dairy Council Digest. It is estimated that U.S. consumers obtain 76 per cent of their total calcium and 43 per cent of their total riboflavin from dairy products. *The National Food Situation*, U.S.D.A., November, 1968.

⁴ *The Impact of Filled or Non-Dairy Products*, op. cit, p. 22.

TABLE B-1
Nutrients in Fluid Milk and Synthetic Milk

Nutrient	Fluid Milk (3.5%)		Synthetic Milk	
	%	Gm/qt.	%	Gm/qt.
Carbohydrates.....	4.9	48.00	6.8	66.00
Fat.....	3.5	34.00	3.1	30.00
Protein.....	3.5	34.00	0.8	7.3
Ash.....	0.7	7.00	0.5	4.9
Calcium.....	0.12	1.15	0.02	0.18
Phosphorous.....	0.09	0.91	0.05	0.46
Sodium.....	0.05	0.49	0.07	0.68
Potassium.....	0.14	1.41	0.36	3.50

SOURCE: *The Dairy Situation*, Economic Research Service, U.S.D.A., May 1968, Pages 33-34.

Cornell University⁵ indicates that 62 per cent of all users of filled milk reported no difference in taste between filled and fluid milk, 12 per cent reported a taste preference for filled milk and 24 per cent a taste preference for fluid milk. This does not, as yet, appear to be true for the synthetic product, although technological developments in the future could well permit this product to more closely approximate the flavour, texture, and palatability of regular milk.

(b) *Relative Ingredient Costs*

A U.S. Department of Agriculture study of ingredient costs indicates that fluid milk cost 14.2 cents per American half gallon more than filled milk (Table B-2). An Arizona market study⁶ of February 1968 showed ingredient costs per half gallon of 28 cents for fluid, 15.44 cents for synthetic and 18 cents for filled milk. A Wisconsin report showed fluid milk costing 9.4 cents more than synthetic and from 4.4 to 12.4 cents more than filled milk, per half gallon.⁷

Since the U.S. Department of Agriculture through Federal Milk Orders, appears to have taken the stand that non-fat milk solids utilized in filled milks are to be priced at Class I levels, (i.e. highest prices) all costs of filled milk would be at the higher levels cited above (e.g. Col. 2 rather than 1 in Table B-2). This policy widens the cost differential between filled milk and the completely non-dairy substitutes, but lowers it between regular fluid milk and filled milk. The differential between fluid milk and filled milk (Class I prices) on the one hand and synthetic milk on the other is considerably lower in Wisconsin than in Arizona or in the U.S.D.A. estimates. This is apparently

⁵ "An Analysis of the Milk Substitute Situation", Call, D. L., and Wilkerson, L. J., Department of Agricultural Economics, Cornell University, October 1968.

⁶ *The Impact of Filled or Non-Dairy Products*, A special study for the Milk Industry Foundation, May 1968.

⁷ *The Filled and Imitation Milk Story and What to Do About These Products*, talk given by Dr. Truman F. Graf, University of Wisconsin, at the Illinois Milk Producers Association Annual Meeting, Chicago, Illinois, November 1968.

TABLE B-2
Estimated Ingredient Costs of Fluid and Substitute Milks, U.S.A.

	(1) Filled milk using:			
	Non-fat ¹ dry milk	fluid ¹ skim milk	Synthetic (hypothetical)	Whole milk ¹
	(In Cents per U.S. Half Gallon)			
Fluid skim.....	—	15.2	—	15.2
Non-fat (dry milk).....	9.4	—	—	—
Protein (soy protein).....	—	—	5.7	—
Milk fat.....	—	—	—	12.0
Vegetable Oil.....	2.7	2.7	2.7	—
Emulsifiers and Stabilizers.....	2.8	2.8	2.8	—
Buffer, body agents sweeteners.....	—	—	1.8	—
Total cost per half gallon.....	14.9	20.7	13.0	27.2

¹ Whole milk priced at \$6.33/cwt., 3.5% bf. with a bf. differential of 80 cents. Dry milk priced at 24.5 cents/lb., vegetable oil at 21 cents/lb., base mix at \$3.00/lb.

SOURCE: *The Dairy Situation*, Economic Research Service, U.S.D.A., May, 1968, Pages 33-34.

due to regional differences in the pricing of regular milk and has undoubtedly been a major influence in the variable penetration of milk substitutes in different markets.

(c) *Administrative and statutory influences*

Currently, administrative and statutory barriers to both filled and synthetic milk appear to be in a state of flux. Over 30 states have laws or regulations prohibiting or regulating the sale of filled milk products within the state. In addition, the Federal Filled Milk Act prohibits shipment of filled milk products in interstate commerce. However in many states filled milk acts have been and are being challenged in the courts. The opinion has been expressed that the Federal Filled Milk Act will be challenged in the near future.⁸

In the states in which filled milk is permitted, a variety of regulations concerning composition standards and labelling exist or are being clarified.⁹

Few states have statutory barriers pertaining to the manufacture and sale of the completely synthetic product. Non-dairy products can move freely in interstate commerce and are legal in at least 35 states. However, it is expected that regulations concerning standards of composition and labelling will be introduced at both federal and state levels.

⁸ "A Realistic Approach to Milk Pricing" Dr. T.F. Graf, Dept. of Agricultural Economics, University of Wisconsin.

⁹ See "Federal and State Standard for the Composition of Milk and Certain Non-Milkfat Products", Agricultural Handbook No. 51, Consumer and Marketing Service, U.S.D.A. For example, New York State designates as "melloream" any substance, mixture or compound which contains vegetable fat or oils and proteins derived from animal or vegetable sources and where appearance, odor, and taste is similar to cream, half and half, milk or a mixture of milk and cream to a point of rendering these products difficult to differentiate from each other".

In the United States there are more restrictions on the production and marketing of filled milk which contains non-fat dairy solids than there are for the synthetic product which contains no dairy ingredients.

(d) *Market penetration*

Filled and/or synthetic milk have been marketed in about 20 states with significant market penetration of the filled product only in Hawaii (over 20 per cent of total milk sales) and Arizona (over 10 per cent of the milk market); penetration in other markets has amounted to less than 2 per cent in every case. Data compiled by the U.S.D.A. on filled and synthetic milk sales in Federal Order markets are summarized in Table B-3 for the 12 months November 1967 to October 1968. Neither filled nor synthetic milk sales would appear to have made a major inroad into the total fluid market and account for only about 0.5 per cent of the total Class 1 sales in the 30 Federal Order markets in which they are sold. Market growth has been slower in most recent months.

TABLE B-3
Filled and Imitation Milk Sales in Federal Order Markets,
U.S.A. 1967 and 1968

	Filled Milk		Synthetic Milk
	using Fluid Skim	using Non-fat dry	Non-dairy fat and protein
Nov. 1967			
No. of markets.....	13	9	3
No. of handlers.....	30	11	3
Volume '000 lbs.....	1,787	581	n.a.
Feb. 1968			
No. of markets.....	19	8	12
No. of handlers.....	37	22	10
Volume '000 lbs.....	3,480	1,078	n.a.
May, 1968			
No. of markets.....	20	10	7
No. of handlers.....	45	17	10
Volume '000 lbs.....	4,202	879	n.a.
August, 1968			
No. of markets.....	16	9	8
No. of handlers.....	40	15	8
Volume '000 lbs.....	4,428	846	n.a.
October, 1968			
No. of markets.....	16	8	8
No. of handlers.....	41	15	8
Volume '000 lbs.....	4,888	753	n.a.

SOURCE: *The Dairy Situation*, Nov. 1968, U.S.D.A. data for October, as yet unpublished.

The failure of synthetic milk to match the taste of regular milk has undoubtedly been a major factor influencing consumer acceptance of this product. In addition, the nutritional deficiencies of synthetic milk and the uncertainties of nutritional and composition standards to be adopted by the U.S. Food and Drug Administration appear to have inhibited wide-spread market development. Reports indicate that it has been market tested in several regional markets. The following observations appear to be typical of the marketing developments and the synthetic product.

Imitation Milk was sold in at least 17 stores of four chains in Connecticut from January to March 1968 with the time period of sales for each chain ranging from 21 days to 47 days . . . in New York State, synthetic milk sales have been small or non-existent¹⁰

Three non-dairy milks have been offered for sale in Michigan . . . it is my understanding that consumer acceptance and sales have been low and that at least one of these products has been removed from the market and the others will be removed soon.¹¹

Filled milk sales have increased phenomenally in Hawaii and Arizona and very modestly in other markets. A Cornell University study on the status of milk substitutes in three U.S. markets disclosed that filled milk has not reached the acceptance level in New York State that it has in other markets even though priced at a wider retail price differential relative to regular milk. This indicates that the intensity of the initial promotion of the substitute product, the length of time consumers have been aware of and their attitudes towards the substitute product may also be influences contributing towards different sales levels among different markets.

Concerning these other variables the Cornell University study indicates that there is no significant difference between consumers of filled milk and of regular milk with respect to family size or family income. The study does point out, however, that in a survey of consumers who purchase filled milk in California and Arizona, between 60 and 70 per cent of those interviewed mistakenly associated a lower calorie content with filled milk than with regular milk and that between 50 and 60 per cent expressed the opinion that filled milk produced less cholesterol—even though all the products being marketed contained coconut oil as a substitute fat ingredient. As previously noted, coconut oil is reported to be higher in saturated fatty acids than is butter-fat. This study then leaves the impression that at least part of the consumer acceptance of filled milk could be based on faulty premises concerning the attributes of competitive products. On the other hand the rapid market penetration of filled milk in the Hawaii market is generally attributed to a retail price advantage of approximately 20 cents per half gallon.

¹⁰ Correspondence with members of the Department of Agricultural Economics, University of Connecticut.

¹¹ Letter from member of the Department of Agricultural Economics, Michigan State University, April, 1968.

TABLE B-4
Status of Milk Substitutes in Three Markets, U.S.A. 1967-68

	New York (Niagara Frontier)	Arizona (Central)	California (State)
Length of time substitutes have been available.....	6 months	several years	12-21 months
Substitute as percent of relevant class.	1.02	10.80	1.25
Recent trend in sales.....	down	up	steady
May to August.....	1.1%-.86%	9.1%-11.7%	1.27%-1.34%
Type of label.....	Melloream	Trade name	Imitation
Typical price differential per American half gallon.....	13 cents	8-10 cents	8.9 cents

SOURCE: Call, D. L., and Wilkerson, L. J., *op.cit.*

chapter eight

FRUITS AND VEGETABLES

INTRODUCTION

The fruit and vegetable growing industry confronts the country with important and difficult policy issues. These are far out of proportion to the seven per cent of Canada's cash farm income and less than four per cent of the value of agricultural exports for which the industry accounts. The Canadian harvest is very much limited to the June-October period and the industry is in competition with American fruits and vegetables harvested over a much longer season. The earlier United States product sold in Canada brings higher prices to American farmers and takes the edge off Canadian consumer appetites. It is common for the early harvest season of a Canadian crop to coincide with mid-season or even end-of-season harvesting in the United States. The early season advantage of the United States has persistently troubled this sector of agriculture.

The fruit and vegetable industry provides 45 per cent (by weight) and accounts for about one-sixth of the value of food consumed in Canada. In terms of value added, the fruit and vegetable processing industry contributed some \$200 million in 1966 to national income.

The many products of the fruits and vegetables industry complicate any analysis of the sector. The production and distribution conditions of some products are quite similar but others entirely different. In addition to dozens of less important horticultural crops there are almost thirty individual fruits and vegetables grown in Canada, each with a farm value of \$1 million or more per year. Thus we have chosen to consider the problems of only the most important commodities or commodity groups.

Products and Regions

The farm value of vegetables sold by Canadian growers over the period 1962-66 averaged about \$180 million annually. Of this, potatoes accounted for almost \$98 million, or nearly 55 per cent; tomatoes for processing were valued at \$12.9 million; mushrooms at \$7.9 million; fresh market tomatoes, \$6.3 million; onions, \$6.2 million; and peas for processing, \$5.8 million. Thus six crops accounted for more than 75 per cent of the cash farm income from vegetables.

The situation is much the same for fruits. Of the average annual farm value of sales of \$68.5 million over the period 1962-66, apples accounted for \$30.7 million; strawberries and peaches were each valued at \$6.8 million; grapes at \$5.7 million and cherries at \$4.9 million. These five crops thus accounted for 80 per cent of all farm marketing of fruits.

Data for 1962-66 show 40 per cent cash farm income in the Maritime Provinces was derived from these crops. Corresponding figures for other regions were: British Columbia, 22 per cent; Quebec, ten per cent; Ontario, nine per cent and the Prairie Provinces, one per cent.

Geographic distribution of important commodities and/or commodity groups in this sector is presented in Table 1. These data reveal the importance of potatoes in the Maritime Provinces; of other storable vegetables in Central Canada; of processing vegetables, tender fruits and grapes in Ontario and of apples of British Columbia, Ontario and Quebec. They also point to a wide regional distribution of small fruits.

TABLE 1
Regional Percentages of Cash Farm Income by Groups of Fruits and
Vegetables, 1963-66

Commodity Group	Maritimes	Quebec	Ontario	Prairies	British Columbia	Canada
Potatoes.....	39	16	22	16	6	100
Storable Vegetables.....	5	32	44	8	10	100
Fresh Vegetables.....	4	22	57	4	11	100
Processed Vegetables.....	5	17	72	n.a.	9	100
Vegetables, Sub-total.....	26	19	36	12	7	100
Apples.....	11	23	29	0	38	100
Tender Fruit.....	1	0	72	0	27	100
Small Fruit.....	22	24	18	0	35	100
Grapes.....	0	0	95	0	5	100
Fruits, Sub-total.....	10	16	43	0	32	100
Fruits and Vegetables Total.....	22	18	38	8	14	100

SOURCE: C.D.A., *Crop and Seasonal Price Summaries*, various years.

Consumption

The demand for, or requirements of fruits and vegetables in 1980 depend on projected changes in per capita consumption (reflecting changes in incomes and tastes) and population. The response of expenditures on food to changes in income is small but is slightly higher for fruits and vegetables, particularly in the processed form. Demand is stimulated by a shift from raw to processed forms, these representing convenience foods. Thus per capita consumption of processed fruits is projected to increase by 15 per cent from 1964-66 to 1980; and processed vegetables, except potatoes, by 22 per cent in the same period.

With the combined effects of both population and incomes, the Canada Department of Agriculture projects domestic consumption of major fruits and vegetables to increase as indicated in Table 2. This represents a basis for substantial expansion of the industry over the coming decade.

TABLE 2
Canada Fruit and Vegetable Consumption 1964-66 and Projection 1980

Commodity or Group	Consumption 1964-66 (Millions of Pounds fresh equivalent)	Consumption 1980 (Millions of Pounds fresh equivalent)	Percentage Change
Fruits			
Fresh.....	1,916	2,605	36.0
Processed.....	1,690	2,579	52.6
Total.....	3,606	5,210	44.4
Vegetables except potatoes			
Fresh.....	1,684	2,500	48.5
Processed.....	1,674	2,709	61.8
Total.....	3,358	5,210	55.1
Potatoes, Total.....	3,063	3,829	25.0

SOURCE: Z. J. Yankowsky, Frank Shefrin, J. P. Cavin, *Demand Supply Projections For Canadian Agriculture—1980*. Economics Branch Canada Department of Agriculture.

Processing Industry

Fruit and vegetables are highly seasonal in production and many of them are highly perishable. The processing industry performs the important service of transforming seasonal fresh market surpluses into more even annual flows of canned or frozen products, at the same time reducing heavy dependence on imports.

The average proportion of the Canadian commercial crop of the various commodities and/or commodity groups which was processed over the period 1962-66 was as follows: potatoes, 11 per cent; processing vegetables (asparagus, beans, corn, peas and tomatoes), 85 per cent; other vegetables, 12 per cent (over the years 1962-64); apples, 33 per cent; tender fruits, 46 per cent; small fruits, 61 per cent. There has been a rapid increase in the

proportion of potatoes and apples processed over recent years; the former rose from seven to 14 per cent over the 1962-66 period and the latter from 29 to 35 per cent. These trends are expected to continue.

There is a heavy concentration of the fruits and vegetables processing industry in Central Canada. In 1966 there were 314 establishments, over 75 per cent of them located in Ontario and Quebec. Twenty-nine per cent of these establishments with 1966 shipments over \$1 million accounted for more than 85 per cent of shipments by the industry, (\$470 million of which value added was \$200 million). The industry employed 20,558 paying salaries and wages of \$81 million.

International Trade

An examination of the position of this industry in its international trade context provides a good background for consideration of major policy issues. Canada imports far more fruit and vegetables than she exports (Table 3). Among the imports are bananas, citrus fruits and other horticultural crops not grown in Canada and those products such as fresh lettuce which are produced only in greenhouses except for a period of five months during the summer. Thirty per cent of Canada's agricultural imports are fruits and vegetables (\$291 million out of \$991 million, average of 1962-66); horticultural imports are also almost six times as large as exports, a striking contrast to that of the other sectors of Canadian agriculture.

The industry's international trade raises the question of how competitive it is or could become. Much is located close to large Canadian centres of population. The industry produces many bulky, often highly perishable commodities expensive to transport. It appears to have a ready-made opportunity for expansion. Furthermore, per capita and total demand for fruit and vegeta-

TABLE 3
Canada, Trade in Fruit and Vegetables, and Agricultural Products

Period	Total Agri. Exports	Total Agri. Imports	Fruit and Vegetable Exports	Col 4 Col 2	Fruit and Vegetable Imports	Col 6 Col 3	Net fruit and Vegetable Exports-Imports	Net Trade in Fruit and Vegetables of a kind Grown in Canada*
	\$million	\$million	\$million	%	\$million	%	\$million	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Aver. 1956-60.....	966	714	25.9	2.7	234.1	32.8	-208.2	-152.7
Aver. 1962-66.....	1,535	991	51.6	3.4	290.9	29.4	-239.2	-181.5
1962.....	1,157	857	39.6	3.4	267.6	31.2	-228.0	-166.8
1963.....	1,359	1,005	49.1	3.6	279.5	27.8	-230.4	-170.4
1964.....	1,702	1,047	52.2	3.1	288.6	27.6	-236.4	-181.0
1965.....	1,593	1,011	58.3	3.6	304.1	30.1	-245.8	-188.8
1966.....	1,862	1,036	58.3	3.1	314.9	30.4	-256.6	-200.6
1967.....	1,483	1,084	70.8	4.8	322.7	29.8	-251.9	-191.9

SOURCE: C.D.A., Economic Branch, Annual, *Canada Trade in Agricultural Products*.
 *Excludes only the imports of oranges, bananas, grapefruit, lemons and those nuts for which precise trade figures are available.

bles in the domestic market is expanding. More than one-half of the Canadian industry also, is located close to large American metropolitan markets, which apart from tariffs and other trade restraints represent attractive outlets for products Canada can produce competitively. On the other hand, the climate is unfavourable. This cuts down the growing season, interferes with much-wanted continuity of supply and causes highly seasonal and therefore high-cost processing operations. In every part of the fruits and vegetables industry international competitiveness, particularly with the United States, is an important issue. This is considered in the commodity and policy sections of this chapter.

Protection is necessary to permit Canada to have a wide commodity range within its fruits and vegetables industry. For many years protection for most commodities has consisted of periods of seasonal free trade within each year, periods when seasonal duties apply and the use of *ad valorem* duties for periods not covered by above arrangements. These vary from product to product, depending on the Canadian harvesting period and storability of the product. Fresh tomatoes for instance are imported without duty from 1st January through 31st March; the tariff is one and one half cents per pound for 32 weeks maximum, the period to be selected by grower representatives in each of the tariff zones and conveyed to government by the Canadian Horticultural Council; during the balance of the year, the tariff is ten per cent *ad valorem*. In addition to the above basic protective structure, there are available (and seldom used) anti-dumping¹ and other measures to protect Canadian producers against injury.

The Task Force does not consider the protection given this industry to be excessive. It is much lower than that accorded growers in the United States or in almost all other countries. The most significant success in the Kennedy Round tariff negotiations with respect to agriculture was achieved in the fruit and vegetables commodity area. Duties on many fruits and vegetables were reduced and five products (apples, blueberries, parsnips, squash and endives) will be on the free list by 1972. The Task Force commends the achievements of the Kennedy Round negotiations.

There are a number of vegetable crops for which Canada has a seasonal comparative advantage *vis-a-vis* American growers. Thus Canada has been able to export increasing quantities of carrots and onions to the United States from October through April, in the face of U.S. duties from 10 to 11 per cent in the case of carrots and 1½ cents per pound on onions. Free trade with the United States would allow exports of these crops to expand substantially. Turnips and the cole crops are in the same category. Year round free trade would permit Canadian growers to exploit their seasonal advantage. It would also permit Canadian consumers lower cost access to imported fresh products in the period when high quality fresh Canadian produce is not available.

¹ Dumping, a much misunderstood term, means selling in a foreign market at a lower price than in the home market. See chapter 4 on International Trade.

COMMODITY ANALYSIS

Potatoes

Potatoes are the most important of the vegetables produced in Canada, accounting for almost two-thirds of the value of all vegetables produced and about three per cent of Canadian farm cash income. Regionally, income from potatoes is more important in the Maritimes, where it represents 30 per cent of farm cash income. The potato is identified with the economic difficulties of the Maritime Provinces in the same manner as the difficulties of the Nova Scotia coal industry, both sources of low income in the region. In other provinces potatoes account for one to four per cent farm cash income (Quebec, four per cent; Ontario, two per cent; Prairie Provinces, one per cent; British Columbia, four per cent).

Canada normally exports and imports potatoes with net exports averaging about seven per cent of production between 1962-63 and 1966-67. Per capita consumption in the 1960's has been quite stable. The decline in consumption in the fresh form was roughly offset by the increase of consumption in the processed form. Over the four-year period, 1963-66, per capita consumption of processed potatoes bounded from 20.6 pounds to 36.1 pounds. With increasing population, total consumption of potatoes increased from 2,255 million pounds in 1949-51 to 3,063 million in 1964-66. Projected consumption for 1980 is 3,829 million pounds.²

The Provincial distribution of potato production is set out in Table 4. Production and marketing is generally separated into two areas, the dividing

TABLE 4
Potatoes: Production in Canada by Province, 1957-1958 to 1968-69
(Crop Year July 1 to June 30)
(thousand hundredweights)

Province	1957-1958 to 1961-1962	1962-1963 to 1966-1967	1967-1968	1968-1969
	(annual averages)			
Prince Edward Island.....	7,677	8,450	9,607	10,611
Nova Scotia.....	1,207	862	693	612
New Brunswick.....	8,743	11,772	12,585	12,261
Quebec.....	9,578	8,983	7,938	9,716
Ontario.....	8,109	9,860	7,344	8,604
Manitoba.....	1,123	2,576	2,900	3,000
Saskatchewan.....	680	770	576	700
Alberta.....	1,895	2,927	3,200	3,300
British Columbia.....	2,142	1,947	1,900	2,100
Canada.....	41,154	48,147	46,743	50,904

SOURCE: Canada Department of Agriculture.

² Data from Yankowsky and others, *op. cit.*

point being the Lakehead. Production west of that point is about 22 per cent of the national total with most of the marketing there controlled by two marketing boards in British Columbia and two marketing commissions, one in Alberta, the other in Manitoba. There are no effective producer marketing controls in Ontario, Quebec or the Maritimes which account for more than three-quarters of total Canadian marketings.

Data on supply and disposition of potatoes for Canada in recent years presented in Table 5 illustrates the rapid increase in the use of processed potatoes. The import-export position of the industry is also shown.

A recent Canada Department of Agriculture study on the variability of production, marketing and prices of ten important commodities (apples, potatoes, wheat, oats, barley, corn, soybeans, eggs, hogs and cattle) established that production of potatoes was relatively stable, ranking eighth in magnitude of production variability. But in terms of variability of price, potatoes ranked first, reflecting a demand situation in which a small change in the quantity of potatoes offered on the market sharply affects price. It follows then that a small crop brings a larger gross income than a large crop. The severe price and income fluctuations observed throughout Canada, are greater still in the Maritimes. The instability of prices and incomes poses exceedingly difficult and intractable problems for potato growers. It is patently obvious therefore that growers should employ every means at their command to reduce price and income instability.

TABLE 5
Potatoes: Fresh Supply and Disposition, Canada, 1957-58 to 1967-68
(Crop Year July 1-June 30)

Item	Average 1957-58 to 1961-62	Average 1962-63 to 1966-67	1967-68
		(000 cwt.)	
Production.....	41,154	48,147	46,743
Imports.....	1,979	1,514	2,266
Total Supply.....	43,133	49,661	49,009
Used for Seed the following year.....	2,829	2,844	2,912
Processed.....	2,583	5,703	7,340
Exports			
Table Potatoes.....	1,131	1,637	715
Certified Seed.....	1,655	2,515	1,823
Shrinkage (20 per cent of crop).....	8,231	9,630	9,349
Available for Fresh Use.....	26,704	27,332	26,870
Net Trade.....	+ 807	+ 2,638	+ 272

SOURCE: Compiled from *Crop and Seasonal Price Summaries*, Canada Department of Agriculture, various issues.

The problem of widely fluctuating and frequently low prices and incomes becomes more serious on large farms and more highly capitalized farms since cash operating and overhead costs are proportionately greater than for smaller units. This does not prevent the Task Force later arguing that larger units are required to realize economies of production providing there is greater price and income stability. Table 6 records the very wide annual price fluctuations, particularly in the Maritime Provinces. Monthly data would show even wider fluctuations.

TABLE 6
Farm Price of Potatoes by Provinces, 1963-67

Province	Year				
	1963	1964	1965	1966	1967
	(Dollars per Hundredweight)				
Prince Edward Island.....	1.50	2.90	2.55	1.09	1.30
New Brunswick.....	1.40	2.85	2.20	1.05	1.20
Quebec.....	1.85	2.50	2.46	1.72	1.82
Ontario.....	2.00	2.70	2.85	1.56	1.85
Manitoba.....	1.33	3.00	2.70	1.60	1.50
British Columbia.....	2.50	4.20	3.40	3.00	3.20
Canada.....	1.72	2.89	2.59	1.49	1.69

SOURCE: *Crop and Seasonal Price Summaries*, Ottawa, Canada Department of Agriculture, 1968.

There is exceedingly high variation in net income from year to year and returns to the resources employed are satisfactory only for those farmers who have large-scale, efficient operations and/or those who perform a superior marketing job.

The major markets for Maritime potatoes are in Central Canada. About three-quarters of the Prince Edward Island crop and an even larger proportion of that of New Brunswick, are marketed in Ontario and Quebec. More of the New Brunswick crop goes to Quebec than to Ontario and for the Island crop the reverse is true. Most of the Ontario and Quebec crops are sold in nearby markets.

Acreage in Ontario and Quebec dropped nine per cent between 1958-62 and 1963-67; but yields increased about eight per cent. For the same periods, acreages, yields and production in Prince Edward Island and New Brunswick increased 11.4 per cent, 14.8 per cent and 26.9 per cent respectively. Production of fall crop potatoes in Maine, has been stable for more than 25 years.

The increase in production in New Brunswick and Prince Edward Island went largely to export markets, mostly as seed potatoes to countries other than the United States and as table potatoes to the United States.

The high volume and capacity for production of potatoes in the Maritimes cries out for an export outlet in the United States but the United States tariff and quota and/or the American production level prohibit or restrict the

export flow of Canadian potatoes with a consequent lowering of Canadian producer prices. Canadian exports to the United States are also sometimes adversely affected by Import Regulations under United States Potato Marketing Orders. Conversely, higher Canadian price levels which would normally be expected with a shortage of domestic potatoes are frequently not attainable because of imports or the threat of imports from the United States.

The existing tariff structure is to Canada's disadvantage. Canada has an all-year tariff of 37½ cents per hundredweight on all potatoes. The American tariff is at the same level but this is applicable to annual quotas of 45 million pounds of table stock and 114 million pounds of seed. A duty of 75 cents per hundredweight applies on all imports over the quotas. Exports of potatoes are very largely from the Maritime Provinces and the dependence of this region on the U.S. market means that prices in the Maritimes tend to be less than American prices by the amount of the tariff.

By use of marketing boards and commissions the potato industry in Western Canada has achieved greater stability and higher returns than would otherwise have prevailed. Nonetheless, Western growers face stiff competition from the growing areas immediately to the south. Low-priced imports from high-yield and early-harvest areas impose a ceiling on Canadian prices. Downward pressure on Canadian producer prices is set and sustained, not necessarily by actual imports but by the threat implied in the lower shipping point prices and even quotations in the United States.

A speedy system ensuring the application of emergency protection offered by the new surtax provisions of the Customs Act would improve the position of Western potato growers. One of the chief disadvantages of the former protective measure, value for duty, was the slowness with which it was applied.

A speedy procedure would keep injury to a minimum, stabilize prices and result in a higher net income.

The Maritime potato industry has, or potentially has, a comparative cost advantage *vis-a-vis* Central Canada and the Eastern United States, because of advantageous soil characteristics, lower labour costs and land values. The regional and national benefits from that advantage would be realized with a move to free trade in potatoes with the United States. The Task Force recommends the Canadian Government take the required initiatives in that direction.

To continue over the next decade to hold a competitive position in the Central Canada and United States markets, regardless of the outcome of the tariff and quota issue, Maritime farmers and their potato marketing agencies must proceed with a vast re-structuring of the industry. For instance, the 1966 Census of Agriculture showed that only eight per cent of the growers in Prince Edward Island and New Brunswick having more than three acres of potatoes actually grew more than 67 acres. (Both university horticulturists and prominent growers consider acreages from 100 to 200 and upward per farm are required to realize an efficient use of modern technology). And

while rapid progress is being made in expanding potato acreage per farm more than half the farms in the two provinces are still as small and technologically irrelevant as the five-to-ten-cow dairy farm.

Marketing potatoes is equally badly handled. Evidence presented to the Task Force pointed to patternless and almost meaningless price fluctuations. This system involving Maritime shippers and brokers in the wholesale markets of Montreal, Toronto and American cities is clearly inefficient. The irregular and unattractive pack of Maritime potatoes is partly to blame. It is difficult for the Task Force to understand why growers in this important sector of agriculture have not themselves attempted to market or at least to control the marketing of their products. Growers could have obtained these marketing powers over the last 30 to 40 years for the asking, under the same type of legislation successfully used by growers in British Columbia and the Prairie Provinces. The Task Force notes with satisfaction that Prince Edward Island is now moving toward comprehensive marketing controls.

A few large Maritime grower-shippers are doing an excellent marketing job. They offer a uniform product grading well over Canada No. 1 and offer it with continuity of supply. The few are well paid for their efforts. These same gains are equally available to all farmers provided they perform or control their own marketing of a reliable quality product.

Experiences in Ontario which could very well be repeated in Quebec accentuate the need for rapid improvement in the industry in the Maritime Provinces. Cash crop farming in Ontario is making rapid advances in technology. Potato production is no exception. Under the "protection" afforded by transportation costs from the Maritimes to Ontario and Quebec, the numbers of large, highly mechanized farm units are increasing rapidly. These large farms produce a superior product and are able to perform their own marketing through direct contacts with nearby chain stores and other outlets. Without a rapid change in the Maritimes, these Ontario and Quebec farmers will increase their share of the Central Canadian market.

The recent introduction of futures trading in Maritime potatoes on the Winnipeg Grain Exchange (with contracts deliverable in Montreal) has raised considerable controversy. The Task Force feels that for the Maritime product which has a very high degree of price instability and where shipper-broker relations have been open to wide-spread questioning, the introduction of futures trading is advantageous. The trading brings many new buyers and sellers into the market and the futures market may be used as a genuine hedge (or price guarantee) by growers. The only criticism of the existence of futures trading in potatoes which the Task Force encountered came from a marketing specialist in Maine. He stated farmers, observing the apparent spreads between cash and distant futures at harvest time would not deliver any substantial part of their crop in the last three months of the calendar year. This withholding action has reduced the Maine share of the Boston and New York markets substantially over the post-World War II period.³

³ University of Maine potato marketing specialist. We have already noted that production in Maine has not increased over the past 25 years.

The potato grade standards under the Canadian Agricultural Products Standards Act are primarily for trading in large quantities rather than for consumer purposes. It is possible, for instance, that from a carload of No. 1 potatoes a package may possess no grade defects while another may have 100 per cent defects and still the carload may be properly graded under existing standards. Furthermore, grade standards are not rigidly enforced, particularly in Quebec and New Brunswick. The laxity has led to considerable consumer complaint. Better grading must be oriented to consumer demand. We should make it perfectly clear that Canada and United States first grade are identical. But the quality of American potatoes in retail packs is higher than in Canada. This is attributable to American shippers packing to a standard well above U.S. No. 1.

Present grade standards are largely based on visible characteristics of potatoes but for some markets further criteria such as starch content, specific gravity and chipping or cooking colour are required to measure suitability. Measurable indicators of quality for particular uses should be considered.

Lack of reliable supplies of quality potatoes has led potato processors to ask for duty-free entry of potatoes for chipping purposes during the May-August period. The processors claim suitable potatoes are not available in Canada at that time but that they are available in the United States. They claim Canadian storage facilities are not capable of maintaining potatoes in proper condition, that microwave processing which might handle older potatoes is too expensive and that potato chips cannot be made much in advance of consumption. On the other hand, growers argue they will produce the proper potato and store it if the processor will contract at the beginning of the season. This issue will probably be resolved by the development of new varieties suitable to meet these special needs. This research is in progress.

Other Storable Vegetables

The most important storable vegetables other than potatoes are carrots and onions. The former accounted for annual average value of \$6.6 million over the period 1962-66 and the latter for \$7.0 million. What is more important is that production of these crops is expanding rapidly and further rapid expansion may be projected. In contrast, other storable vegetables (turnips, cabbage, beets and parsnips) produce relatively small incomes and production of the latter two is declining.

Carrots are produced in every province, with Quebec being the largest producer, followed by Ontario. Acreage in Quebec (8,550 in 1967-68) has been consistently larger than in Ontario (3,226 in 1967-68), but yields per acre in Ontario have exceeded those in Quebec. The two provinces account for about 90 per cent of Canadian commercial production, averaging 352 million pounds over the past four years. Table 7 presents data on the supply and disposition of carrots over the past eleven years.

Consumption of both fresh and processed carrots is also increasing. Between 1957-61 and 1962-67, domestic disappearance of fresh carrots rose 15 per cent and of carrots for processing by 33 per cent. (About 17 per cent of the crop is processed). The 1967 per capita consumption of fresh

carrots was 17.7 pounds. Domestic carrots supplied 76 per cent of the market the remainder was imported.

Imports of fresh carrots largely from March through to July, when domestic carrots are either in short supply or not available, dropped slightly over the ten years 1957 to 1967. Exports of fresh carrots during the last five years have ranged from 37 to 56 million pounds with a tendency for increased exports. Since the loss of carrot market in Britain in the early 1960's nearly all Canada's international trade in fresh carrots is with the United States. Producers in both Ontario and Quebec have demonstrated their ability to compete successfully in the north-eastern states despite a tariff of about ten per cent.

TABLE 7
Carrots: Fresh Supply and Disposition, Canada, 1957-58 to 1967-68
(Crop Year July 1-June 30)

Item	Average 1957-58 to 1961-62	Average 1962-63 to 1966-67	1967-68
	(000 pounds)		
Production.....	244,399	351,838	355,060
Imports.....	80,441	76,885	89,184
Total Supply.....	324,840	428,723	444,244
Fresh Exports.....	19,498	46,441	45,501
Available for Domestic Use.....	305,342	382,282	398,743
Processed.....	39,916	60,074	52,000
Available for Fresh Use.....	265,426	322,208	346,743
Net Trade.....	-60,943	-30,444	-43,683

SOURCE: *Crop and Seasonal Price Summaries*, Ottawa, Canada Department of Agriculture, 1968.

A large proportion of the Canadian crop is already produced on organic soils, but Quebec has some 200,000 acres of undeveloped organic soils in an area only a few miles from the United States border and less than 300 miles from the Boston market. Private and co-operative shippers are now well established in the Boston market and others in the north-eastern United States, despite the duty. These exporters sell a washed, attractively packaged, uniform product in contrast to the unsatisfactory marketing practices over much of the Canadian vegetable industry. With the tariff reduced to six per cent by 1972 and particularly under conditions of free trade, the Canadian industry and especially the Quebec industry, would expand rapidly but Canada would continue to depend on imports during late spring and summer months. Credit for development of the organic soil areas of Quebec promises a high pay-off and should be made available.

Onions, like carrots, are a vegetable of special interest since they have a potential for further rapid expansion, especially if the industry could be placed on a free-trade basis with the United States. Supply and disposition data on a national basis are presented in Table 8. The data point to rapid expansion in production and exports, to some contraction in import and a

moderate increase in consumption in the fresh form. While the expansion of the industry in the 1960's occurred under increased protection (the duty was raised from one to 1.5 cents per pound in 1959) technology in the industry has improved to such an extent that production would expand under free trade.

TABLE 8
Onions: Fresh Supply and Disposition, Canada, 1957-58 to 1967-68
(Crop Year July 1—June 30)

Item	Average 1957-58 to 1961-62	Average 1962-63 to 1966-67	1967-68
	(thousand pounds)		
Production.....	139,192	239,154	224,627
Imports.....	74,392	62,017	86,508
Total Supply.....	213,584	301,171	311,135
Fresh Exports.....	12,263	56,187	26,235
Available for Domestic Use.....	201,321	244,984	284,900
Processed.....	8,044	8,853	6,660
Available for Fresh Use.....	193,277	236,131	278,240
Net Trade.....	-62,129	-5,830	-60,273

SOURCE: *Crop and Seasonal Price Summaries*, Ottawa, Canada Department of Agriculture, 1968.

Production of onions is concentrated in Ontario and Quebec, with the former having twice the acreage of the latter. The major areas of commercial production in Ontario are the Bradford Marsh, the London area and the countries of Essex and Kent. These areas produce over 90 per cent of the production in Ontario. In Quebec onions are grown largely on the organic soils south of Montreal on a relatively small number of fairly large farm units.

Canadian onion production has been quite variable but prices even more so. The fluctuation results in a high degree of income instability which could be moderated if a continental free trade area were established since farm prices in the United States show greater stability.

The present high tariff, 1 3/4 cents per pound applied by the United States and 1 1/2 cents by Canada (for 44 weeks, otherwise, ten per cent), accentuates price and income instability for Canadian onion producers. Nor has the tariff afforded much protection since U.S. prices generally exceed Canadian. Over the years 1962-66 imported onions accounted for more than 20 per cent of Canadian consumption in the 44-week high duty period. Free trade would remove the incentive (and costs) of striving for early season production and would reduce storage costs. While Canadian exports have gone largely to Britain and the British West Indies, Quebec producers are now shipping into the northeastern United States and are confident they can hang on to that market, even with the present high tariff. Again quality and packaging of the onions are excellent. Without a tariff, Canadian onions would be assured a strong position in Boston and other eastern United States markets.

Other Vegetables

Tomatoes are another important vegetable. Over the period 1962-66 the average annual farm value of tomatoes for processing was \$12.9 million and that of field grown fresh tomatoes was \$6.3 million. Greenhouse or glass-house tomatoes had an average farm value of \$3.9 million over the same period.

Eighty to 85 per cent of all tomatoes produced in Canada are processed and the remainder sold at considerably higher farm prices for consumption in fresh form. Ontario produces 97 per cent of all tomatoes-for-processing; within Ontario, production is concentrated in Essex and Kent Counties where yields are high. Tomato production for the fresh market is located close to large urban centres. Consumption in all forms has run from 54 to 64 pounds per capita in recent years.

Canada is a substantial net importer of tomatoes, fresh and processed. During the period 1962-66, imports (fresh equivalent) were 360-370 million pounds, or about 30 per cent of Canadian consumption. Of total consumption of 1,160 million pounds, about 300 million was in the form of fresh tomatoes, of which about 170 million were imported; the remainder of Canadian consumption was processed tomatoes (860 million pounds, fresh equivalent) of which about 200 million pounds were imported.

Canada has had large and growing imports of canned tomatoes and of pulp, paste and puree. Only in the case of soups and juice does Canada have any exports. Canadian tariffs are two cents per pound on whole canned tomatoes, 1.5 cents on tomato paste and 20 per cent *ad valorem* on juice. Although moderately high, these tariffs, have not prevented imports. Tomato paste imports from Portugal have been increasing in recent years.

A disadvantage for Canadian processing plants is the very short harvesting period during which this perishable crop must be processed. Even though other crops such as peas, corn or carrots may be processed using some of the same facilities, the interchangeability of equipment among processed vegetables is limited. Thus over-capacity tends to be a cost-increasing factor in Canada's fruit and vegetable processing industry.

Net farm income from the production of tomatoes for processing varies greatly from year to year, not because of the wide fluctuations in price, as is the case for many farm commodities but because of fluctuations in yield per acre, with acreage and prices remaining fairly stable. The relative price stability is imposed by marketing board negotiations.

The Ontario Vegetables-for-Processing Marketing Board has managed to negotiate prices so high as to promote vertical integration by processors or to inhibit growth in the industry itself. Average farm price per ton paid over the years 1962-66 was \$39 and has been over \$40 in the last three years. In 1968 the average farm price was \$47.40 per ton, compared to \$37.10 in Michigan.

An Ontario study showed that labour costs represented over 40 per cent of total costs even in 1961-62. Mechanization of tomato harvesting is making progress in the United States but is of limited use in Canada because its efficient use requires much larger farm operations than prevail in Canada. The economies available through mechanized harvesting may force a major

re-structuring of the Canadian industry. Since 1967 West Indian labour has been flown to Canada to help during the fruit and vegetable harvesting period. In importing seasonal farm labour Canada is moving in the opposite direction from the United States, which has imposed severe restrictions on the migration of Mexican harvest labour to that country.

Among other vegetables, mushrooms, corn, cucumbers and peas are most important. But singly they represent negligible proportions of Canadian farm income and very small proportions of the income of commercial vegetable production. The average annual values of farm sales of these vegetables in the 1962-66 period was (in thousands of dollars):

Mushrooms	7,915 (1963-66)
Corn for processing	3,903
Peas, processing	5,579
Corn, fresh market	2,742
Cucumbers, field grown	3,141

These, as other vegetable crops, are of interest in an economic evaluation of the industry because of their very high per acre input requirements, particularly of hired labour.

Apples

Apples are grown commercially in all regions of Canada except the Prairies. They are the most important single fruit grown in Canada accounting for 45 per cent of the farm value of all fruit produced, 13 per cent of all fruits and vegetables and just under one per cent of total cash farm income. British Columbia is the leading province in apple production, producing one-third of the Canadian output over the crop years 1962-63 to 1966-67. Ontario ranked second, producing about one-quarter of the crop in the above period. Quebec followed with production close to the Ontario level. Nova Scotia produced 13 per cent of this crop and New Brunswick two per cent. Data on production by provinces are presented in Table 9.

TABLE 9
Apples, Production in Canada by Provinces 1957-58 to 1968-69
(Crop Year July 1-June 30)

Province	1957-58 to 1961-62	1962-63 to 1966-67	1967-68	1968-69
	(thousand pounds)			
Nova Scotia.....	108,261	127,197	157,500	125,550
New Brunswick.....	20,025	20,700	22,500	22,500
Quebec.....	154,395	241,920	232,200	252,180
Ontario.....	196,344	255,492	267,390	273,600
British Columbia.....	237,285	313,551	303,165	229,545
Canada.....	716,310	958,860	982,755	903,375

SOURCE: *Quarterly Bulletin of Agricultural Statistics*, various numbers, Ottawa, D.B.S.

Apple consumption in Canada has been increasing on a per capita basis in both fresh and processed forms. The following tabulation presents 1964-66 data as well as 1980 projections respecting per capita consumption:

Product	1964-66	1980
	(pounds per capita)	
Fresh.....	26.5	27.0
Processed (fresh equivalent).....	13.5	19.0
Total.....	40.0	46.0

SOURCE: The D.B.S., in Reference Paper 25, shows per capita consumption in fresh form at 19.8 pounds and in processed form at 9.3 pounds annually for 1958-59. However, these data are not strictly comparable with those in the above table.

The rapid increase in per capita consumption of processed apples is very significant. However, it must be recognized that apples for processing have a lower unit value at farm level than those going to the fresh market. In considering per capita data, it must be noted that in the United States there has been a six-pound decline in consumption in the fresh fruit form over the past 20 years. However, consumption habits are different in Canada enabling the Task Force to accept the Canadian data, including the projections to 1980. Apple consumers demanding specific varieties, and the production and marketing sectors of the industry are adjusting to these demands. Controlled atmosphere storage and new apple products, (e.g. frozen apple crisp) are important factors in expanding consumption.

Supply and disposition data presented in Table 10 show a rapid expansion in production, fresh exports, processing, and in consumption of fresh apples over the 1957-67 period. Imports are five to six per cent of total supply, but exports are two to three times as large as imports. The major processed products are apple juice, canned apples and apple sauce amounting in total to an average of 320 million pounds fresh equivalent over the years 1962-63 to 1966-67. Over those years consumption of processed products were about 75 per cent of consumption of fresh apples.

TABLE 10
Apples, Supply and Disposition, Canada 1957-58 to 1967-68

Item	Average 1957-58 to 1961-62	Average 1962-63 to 1966-67	(1967-68)
	(millions of pounds)		
Production.....	716	959	983
Imports.....	55	51	66
Total Supply.....	772	1,010	1,049
Fresh exports.....	112	138	169
Processed, fresh equivalent.....	210	320	350
Waste.....	104	130	130
Available for fresh use.....	346	422	400
Net trade.....	+56	+87	+103

SOURCE: Economics Branch, C.D.A.

Apple exports increased from an annual average of \$7.1 million in 1957-58 to \$14.7 million in 1967-68, mainly to the United States' market which has been expanding very rapidly. Increasing shipments have gone to some 15 to 20 other countries. Almost all the small new export markets are the result of the excellent export market development and selling job done by the British Columbia Tree Fruits Limited, a producer-controlled marketing agency. The same organization has in the past five years accounted for more than one-half of the exports to Britain and for 80 per cent of shipments to the United States. The implications of increasing import restrictions by Britain and the coming free trade with the United States are examined in the policy section at the end of this chapter. An analysis of the annual variability of production, marketings and farm prices shows that compared with nine other farm commodities apples ranked about the middle for production and marketing variability but second after potatoes for farm prices variability. With this product also there is a need for a re-assessment of marketing policies, for market research and development and for greater producer control over marketing.

Strawberries

Strawberries are the largest and fastest growing of the "small fruit" group which also includes raspberries, blueberries etc. Among the fruits, the crop ranks second to apples in terms of farm income. Commercial production occurs in all regions except the Prairies and is most important in British Columbia. Over the years 1962-66 average annual farm values by regions were: Maritimes \$1.2 million; Quebec \$1.5 million; Ontario \$1.8 million and British Columbia \$2.3 million for a Canadian total of \$6.8 million.

The average acreage of strawberries in the above period was almost 13,000 acres. Yields average less than 3,000 pounds per acre. This compares with an average yield of 6,800 pounds in the United States over the past ten years. Average farm prices over the past five years ranged from 24 to 31 cents per pound. Because strawberries are extremely perishable even in cold storage and because harvesting in each area is confined to a short period of about one to three weeks, there is usually great pressure to market the fruit. As a result, the price of the fresh produce is relatively unstable although processing provides an important and stabilizing outlet, especially in British Columbia. In 1962-66, nearly one-half of Canadian production was processed but in British Columbia the proportion was more than 80 per cent.

Per capita consumption in fresh form is constant but consumption in frozen form is increasing. Over the years 1962-66 average per capita consumption was only three pounds, with 1.9 in fresh form and the balance in processed form. Canadians consume about 65 million pounds of strawberries annually of which about one-half are imported either fresh or as frozen berries.

The Canadian strawberry industry is vigorous and growing. Between 1957-61 and 1962-66 production increased from an average of 27.7 to 32.1 million pounds annually, and increased to more than 41 million pounds in both 1967 and 1968. Imports have declined by 15 to 20 per cent in the 1960's.

The present Canadian Most Favoured Nation tariff on fresh strawberries gives producers the right to opt for a rate of 1.6 cents per pound for a maximum of six weeks between April and August; entry is free from September 1 to March 31 and ten per cent *ad valorem* at other times.

The U.S. tariff on fresh strawberries, applicable from June 15 to September 15, is being reduced from 0.4 cents per pound in 1969 to 0.2 cents per pound by 1972. If North American strawberry prices continue to rise, the relatively low specific duty will present no obstacle to competitive Canadian exports to the U.S. market by 1972. There is a great need and an opportunity for improvement in yield technology through greater use of irrigation, better cultural practices, the use of higher yielding varieties and the use of improved marketing techniques. Growing earlier and later varieties will also lengthen the marketing season for Canadian producers.

Peaches

Peaches are the most important of the tender fruits, (peaches, cherries, pears, plums and prunes) produced in Canada, representing about 40 per cent of the value of this group. They are grown commercially only in Ontario and British Columbia. For the period 1962-66, Ontario produced 80 per cent of Canadian output with the balance in British Columbia. Numbers of trees declined by 15 per cent over the period 1956-60 to 1962-66 while production declined by 12 per cent over that period. The land area devoted to peaches decreased by 15 per cent from 1951 to 1961 and by a further 19 per cent from 1961 to 1966. Yields increased sharply during the 1950's and moderately in the 1960's. Much of this however was the result of taking the less productive areas out of this crop.

Per capita consumption of peaches in fresh form reached a peak in 1952 at seven pounds and has declined continuously since, now being less than five pounds. Consumption in processed form has varied from 4.2 to 4.5 pounds per capita, with no trend. Because of rising population, total consumption of peaches, both fresh and processed, rose by five per cent during the six year period 1956-60 to 1962-66.

The foregoing data point to an industry in slow decline. Exports have been negligible and imports have grown as a proportion of total supply in the Canadian market. Prices and gross incomes, however, have risen. Price increases have generally been consistent with those in the United States, which supplies most of Canada's imports.

Ontario Department of Agriculture and Food studies show that farmers in the industry have made sweeping changes in farm organization and practices as a means of fighting spiralling costs. (The studies covered the periods 1954-56 and 1965-66). By far the most rapidly rising cost was that for use of land and buildings. The value of peach land doubled from 1955 to 1965 rising from about \$1,000 to \$2,000 per acre. The peach area generally is highly subject to the influences of urbanization and some properties to be used for housing subdivision recently changed hands at prices

ranging from \$3,000 to \$6,000 per acre. Short of zoning regulations, much of the present peach area could pass into other uses in one or two decades.

About 55 per cent of Canadian production is consumed in fresh form and 45 per cent is processed. Domestic peaches have encountered serious problems in the processing market. Imports, which in 1956-60 claimed 29 per cent of the Canadian market, expanded their share to 53 per cent in 1962-66 and to 68 per cent in 1968. Australia, a traditional supplier was virtually out of the Canadian market (one per cent of canned imports in the period 1958-62) yet by 1967 Australian imports supplied 38 per cent of the market. In 1967 Canadian producers and the processing industry alleged that the great increase in imports was a result of Australian government export subsidies. They asked (1) that representations to the Australian government be made; (2) that the question of the alleged subsidy be examined; and (3) that failure to secure satisfaction from the Australian government should be met with protection and/or subsidies to the Canadian industry. While the above allegations were never conclusively proven, after negotiations between the two governments, the Australians early in 1968 raised the price of shipments to Canada. Later that year the Canadian government introduced a program providing for the remission of seasonal duties on tender fruits for processing if domestic supplies should not be adequate.

It is important to tender fruit growers and to consumers that peaches account for 40 per cent or more of the volume of processed tender fruit. If the Canadian peach-processing industry were to be eliminated, it would have serious effects on the continued viability of the processing of other tender fruits. A sharp decline in volume handled by this processing sector would require a drastic restructuring of the industry.

Other Fruits

While there are a large number of other fruits of economic importance, none accounts for as much as one-fifth of one per cent of Canadian cash farm income. We note here those fruits which in the period 1962-66 produced average annual cash farm incomes in excess of one million dollars. These were, in thousands of dollars:

	1962-66	1967
Grapes.....	5,634	7,196
Cherries.....	4,870	7,493
Blackberries	3,860	n.a.
Raspberries.....	3,820	3,475
Pears.....	3,663	4,814
Plums and Prunes.....	1,267	1,365

POLICY ISSUES

In the introduction to this chapter we noted that policy problems in the fruits and vegetables industry had occasioned far more concern than its economic importance would suggest. These arise at provincial, national and international levels. The Task Force has considered some of the leading international trade problems.

INTERNATIONAL TRADE

Maritime potatoes, vitally important to New Brunswick and Prince Edward Island, have actual and potential comparative cost advantages over other Canadian and North Eastern United States areas. The development of the industry and thus of the farm economies of these two provinces, is frustrated by the level of the United States tariff and the accompanying quota arrangements. The Task Force recommends as a matter of urgency that the Federal Government move to negotiate reductions on tariffs both ways and elimination of the U.S. quota. In spite of the difficulties in achieving reductions the target should be the total removal of both.

The Task Force recommends that the Federal Government take strong initiatives toward serious discussions of free trade for a further group of vegetables and fruits in which Canada has comparative advantage including carrots, onions, cole crops, turnips and cranberries. Apples are virtually on a free trade basis now and will be completely free in 1972. For those crops placed on a free trade basis an increase in resources invested and substantially higher incomes can be projected. Trade would develop on the basis of serving particular geographic areas of the United States during the harvest and normal storage periods. The scope of the U.S. market is enormous and very large population concentrations live close to important Canadian producing areas.

The proposal to move to free trade on the products named above would leave some of the Canadian potato industry exposed in a non-viable position. The Task Force recommends that any move toward freer or free trade be accompanied by the provision of adjustment assistance to those sectors adversely affected by any such move.

The poor prospects for exports of apples to Britain and Europe and our success in exporting to the United States leads the Task Force to recommend that the Nova Scotia apple industry concentrate its sales efforts on the American market.

DUMPING, DISTRESS AND INJURY

Canadian farmers must compete with low priced imports entering at cyclically or seasonally depressed prices. Horticultural producers feel it particularly, since the harvest season in the United States is earlier by up to two or three months compared to Canada. For the Task Force general position on trade policy, trade strategy and adjustment assistance the reader is referred to Chapter 4 on International Trade.

MARKETING BOARDS

In Ontario there are eight fruit or vegetable marketing boards and an apple commission; in British Columbia two vegetable boards and a tree fruits board; in Alberta and Manitoba there are commissions which control potato marketing; and in Prince Edward Island there is a potato marketing board

which imposes neither production nor marketing controls, although comprehensive marketing controls may be set up in 1970.

While the business conducted by some of these boards is so small they could scarcely do an efficient job, others particularly the boards in British Columbia, do an effective job. The British Columbia success is based on strong market development and merchandizing emphasis. Some of the Ontario boards, e.g. the peach marketing boards, provide very useful marketing services. But why have two boards for peaches and two for grapes? Consolidation of some boards is desirable. The Task Force notes with approval the single board created to control the marketing of all vegetables for processing in Ontario. The Ontario Onion Producers Marketing Board on the other hand ceased operation in 1969. A stronger commercial orientation may permit more aggressive exploitation of the American market.

While vegetables for processing in Quebec are under generally satisfactory contract arrangements, producer marketing of fresh vegetables is most unsatisfactory. Producer marketing boards for the more important fresh vegetables would result in improved grading and pricing. Quebec has the potential to increase production considerably both on the black organic soils and generally in areas within 40 miles of Montreal. Funds from the Canadian Dairy (Adjustment) Commission should be used to aid in this development. However, we stress that in the development of the latter area marketing is even more important than production. Without continuity of supply, high quality, and attractive packaging Quebec products could not replace American and Ontario imports which presently dominate the Montreal market. Produce marketing controls would be required to replace the present unsatisfactory marketing structures.

Inter-provincially, there are problems of competition and unco-ordinated action between provincial boards. Also board-marketed fruits and vegetables in some provinces compete with the products marketed privately or by co-operatives in other provinces. The best example of the variation is in apples. British Columbia uses comprehensive board controls and aggressive marketing and merchandizing. Ontario uses less stringent marketing controls through its Commission. Quebec has provincial grading which is not adequately enforced so culls and windfall apples find their way to the fresh fruit market. Nova Scotia has a strong co-operative which performs limited functions well but there are no marketing controls. The result is that there is much unproductive competition which tends to erode prices on a national basis. This is a prime example of the need for co-ordination across provincial borders, whether it be secured by a national apple marketing board plan or something short of that. No such organization can be established without strong all-producer marketing organizations in Quebec and Nova Scotia.

Just as the need exists for producer controls over potato marketing in the Maritimes, there is also a need for co-ordination across provincial borders probably through a national potato marketing board. In proposing extension of marketing controls either for potatoes or apples, precautions must be taken as stated in Chapter 12 on Marketing Boards, to ensure against the use of boards to restrict inter-provincial trade.

It is to the detriment of growers that with some very notable exceptions, senior management personnel of producer marketing boards, having come up

through agriculture, have not had the training and experience in marketing essential to success. Marketing and management specialists must be recruited from business firms outside agriculture, besides exchanging successful marketing specialists between marketing boards, irrespective of commodities. Personnel from the British Columbia producer marketing boards and co-operatives could make very useful contributions to improved marketing in Eastern Canada.

Some marketing boards, such as those marketing vegetables and fruit for processing, negotiate with processors for uniform conditions and terms of sale and for minimum prices. The major problem of such bargaining is that there is no legal possibility of an aggressive producer forcing himself into the industry by offering to produce and sell at prices lower than those negotiated. Selection of growers becomes one of the functions of each processor and must be performed without price as a guide. There is a dilemma here; producers need the assurance of contracts before committing large sums to the production of specialized crops, and processors too, need to be assured of at least a basic supply through contracts. Yet the pattern of negotiations eliminates price competition among producers within the board's area, with a consequent adverse effect on production efficiency.

The emphasis on an orientation toward exports in the earlier part of this chapter suggests the need for sectors of the fruits and vegetables industry to undertake export promotion. This should be on a national basis with producer-marketing boards providing leadership but it must involve all groups concerned with the product, including governments. Considerable success has attended such efforts in the United States. Producer marketing organizations should have a central role in export promotion because only such groups can make the necessary "check-off" at the farm level. It must be recognised that promotion activities on behalf of some products, e.g. carrots, onions and turnips may have little or no value, for with these commodities price and quality rule.

Deriving from the foregoing commodity analysis, we state very bluntly that in the fruit and vegetable sector marketing institutions or machinery, marketing methods, in fact in the whole conceptual approach to marketing, Canada is far behind the United States. And yet in every part of the industry very strong competition comes from that country. The Canadian industry must make an aggressive approach to improving this situation in all its aspects from the farm to retail levels. We note with approval that the federal manpower training program has established courses for workers at the wholesale and retail levels. These very successful efforts should be expanded and extended to other market functions. But this is only a beginning. Growers, the trade and governments must work together for the improvement of all aspects of marketing of these products. This of course requires much more research on marketing and market development.

PROCESSING INDUSTRY

The fruits and vegetables processing industry is exceedingly competitive and yields low returns on equity capital while making a very important

contribution to Canadian agriculture and consumers. A major public policy issue arises from the increasing domination of the industry by American companies in the same business. Research for the Task Force estimates that over 70 per cent of the pack of fruits and vegetables is processed in American owned plants. The parent company of some of these Canadian firms appears reluctant to use in Canada the advanced machinery and technology used in its American plants. The American investors may have good private reasons for such practices but such a policy means that technology in Canada advances more slowly than would otherwise be the case.

Perhaps more important is the fact that some American parent companies restrict their Canadian subsidiaries in the export field, preferring to handle this business from U.S. plants. In the case where the American companies have world-wide operations, they generally refuse to allow Canadian subsidiaries to export to any country where the parent company has a local plant. The restriction has happened in situations where the Canadian company, before acquisition, had successfully penetrated markets in third countries. The Task Force suggests the Department of Industry, Trade and Commerce attempt to devise a system of economic measures or incentives to encourage foreign companies in Canada to allow their Canadian subsidiaries to participate in export trade.

QUALITY AND GRADING

Consumers frequently make unfavourable comparisons between Canadian products and those of the United States. While grade standards and lax enforcement of government grading regulations are in part responsible for these criticisms, it is not a general situation. For many commodities American packers sell under a brand name rather than on the basis of government grade. The usual practice is for the packer to set his own standard significantly above the U.S. No. 1 grade. The same practice is occurring in Canada.

The Task Force concludes that, in general, grading is well done at the time the actual grading takes place. But, again in general and recognizing some notable exceptions, packaging and merchandizing of the Canadian product falls far short of American standards. This was brought out clearly at the Canadian Agricultural Congress with respect to lettuce. In the discussion on potatoes the specific suggestion was made to change the grading system to introduce more relevant bases than that of size and visual characteristics. Throughout the range of fruits and vegetables there is need for establishing higher requirements in the Canada No. 1 grade standard. Producers and shippers should welcome a review of grading standards. More important still is that grading be rigidly enforced. It is the industry as a whole which suffers from poor inspection.

CROP INSURANCE

The commodity section of this chapter has sketched the wide fluctuations which characterize yields in many of the fruits and vegetables crops grown in

Canada. The hazards of committing large amounts of resources to annually purchased inputs, at an unusual rate of risk not knowing whether they will be recoverable from sale of the crop, is a heavy risk burden for growers to carry. It is surprising that the provinces have not moved more quickly toward embracing the output insurance provided under the federal Crop Insurance Act of 1960. (Under the Act the Federal and provincial governments share equally in the administrative costs of any approved plan, while the Federal government contributes 25 per cent of the premium costs for all plans). Only British Columbia has made comprehensive use of this legislation for fruit and vegetable production. The annual yields of 13 fruits are covered, as well as strawberry plants, grape vines and fruit trees. Prince Edward Island, Ontario and Manitoba make insurance available on potatoes. Three provinces provide insurance for a single vegetable crop for processing.

The Task Force is convinced the federal-provincial schemes under the Crop Insurance Act are highly advantageous to farmers. Therefore we recommend that farmers and provinces make expanded use of the Crop Insurance Act. Although endorsing the present program, the Task Force sees advantage in expanding the geographic area of insurability for some crops beyond the boundaries of a single province because it is generally desirable to use the largest possible base for any particular crop insurance scheme. Some of the provinces may have only one hundred or less growers for a particular crop. A serious crop failure for potatoes or tobacco in Prince Edward Island might threaten the solvency of a provincial scheme. But if six, seven or ten provinces operated a single crop insurance plan for potatoes, solvency would be assured. The same may be said of apples, which are produced in an important way in four provinces. Therefore, the Task Force recommends an expansion of the Crop Insurance schemes toward regional and ultimately national plans for some crops.

RECOMMENDATIONS

The Task Force recommends that:

Potatoes

1. The Federal government take the initiatives necessary to ensure that free trade in potatoes be established between Canada and the United States, and that adjustment assistance be provided to farmers who would be adversely affected by free trade.
2. Producer marketing boards be used for potatoes in Prince Edward Island and New Brunswick.
3. Assistance be provided for rapidly re-structuring potato farms in New Brunswick and Prince Edward Island to larger-sized units. This could be achieved through Regional Economic Expansion plans.
4. Grading of potatoes be based on objective standards other than visible characteristics; and grading be rigidly enforced in all provinces.

Apples

5. Marketing board controls be used in Nova Scotia and Quebec; and the programs of producer marketing agencies in the four major producing provinces be co-ordinated.
6. Nova Scotia orient its marketing policies toward penetration of the United States market.

Other Vegetables

7. The Canadian government seek free trade arrangements with the United States on carrots, onions, turnips, cole crops and cranberries.
8. Producer marketing controls over fresh vegetables be established in the Province of Quebec; and assistance be provided for expansion of vegetable production in the Montreal area and on the organic soil areas along the United States border south of Montreal.

Dumping and Injury

9. Negotiation be initiated with the United States respecting the introduction of objective standards for the application of quick relief against dumping and/or injury from low priced imports.

Marketing Boards

10. In general terms, marketing boards place more emphasis on market development and that these boards improve management practices by employing highly skilled marketing specialists.

Processing Industry

11. The federal government broaden its program of economic incentives which could encourage all sectors of the processing industry to exploit every economically feasible export opportunity.

Crop Insurance

12. While endorsing crop insurance schemes under the Crop Insurance Act of 1960, consideration be given to making crop insurance available for potatoes, apples and other products on a national basis. Such schemes would, of course, require actuarial soundness within each province or sub-region of a province.

Marketing

13. That growers, the marketing sector and governments move rapidly to modernize marketing structures and the performance of marketing functions. This will require a great expansion of marketing research with an emphasis on market development.

chapter nine

OTHER CROPS

PART A—TOBACCO

IMPORTANCE OF THE TOBACCO INDUSTRY

Tobacco is one of the most important cash crops in Canada. Production of all types in 1968 totalled 223 million pounds (green weight) of which about 72 million pounds were exported and about 150 million pounds were sold in Canada. The total 131,000 harvested acres produced a gross cash farm income in that year of \$142 million.

Total government revenue from all tobacco, cigar and cigarette taxes in 1968 amounted to nearly five times farm returns or about \$700 million. The Federal share was \$555 million. Flue-cured tobacco export earnings were \$55.9 million. Imports ranged between four and six million pounds in the late 1960's. Value added by manufacturers was \$171 million in 1966. National data respecting acreage, production and prices are presented in Table 1.

Ontario tobacco production, almost entirely flue-cured, accounts for more than 90 per cent of tobacco acreage and a larger share of total production. But Quebec produces significant quantities of flue-cured, cigar and pipe tobaccos. Flue-cured tobacco production is beginning in the Maritime Provinces, with about 100 growers in the three provinces. More than 3,000 acres were grown there in 1968 and further expansion in this region is expected.

The introduction of the flue-cured tobacco to the eroded drifting sandy soils of counties along the north shore of Lake Erie transformed these poor areas to highly productive agricultural lands. The 4,500 Ontario tobacco farmers have employed up to 40,000 seasonal labourers in the harvesting season. This large requirement is being significantly reduced by the mechanization of harvesting and curing methods.

Favourable climatic and soil conditions have given Ontario a dominant position in the Canadian tobacco-growing industry. A tariff of 20 cents per pound on unstemmed and 30 cents per pound on stemmed flue-cured tobacco completes the protection of the industry, however, under a Commonwealth arrangement dating to the early 1930's South African tobacco enters free of duty. Growers have exercised control over acreage since 1934. The present board, the Ontario Flue-cured Tobacco Growers' Marketing Board has been the instrument for control since 1957.

TABLE 1
 Canada, Tobacco Acreage, Production and Prices, 1957-61 to 1968-69
 (Crop Year October 1 to September 30)

Item	Average 1957-61	Average 1962-66	1967-68	1968-69 (Estimated)
Acreage				
Flue-cured.....	123,806	107,695	130,170	127,600
Burley.....	4,350	2,759	1,578	1,655
Cigar.....	3,932	2,531	2,300	1,870
Darks.....	479	401	325	335
Total.....	132,567	113,386	134,373	131,460
(thousand pounds, green weight)				
Production				
Flue-cured.....	184,450	183,411	211,300	217,000
Burley.....	7,650	5,658	3,074	3,310
Cigar.....	5,164	3,852	3,403	2,929
(cents per pound, green weight)				
Average Farm Price				
Flue-cured.....	51.22	62.03	71.25	—
Burley.....	36.95	44.36	54.68	—
Cigar.....	26.76	27.04	33.22	—

SOURCE: *Canadian Agricultural Outlook Conference*, C.D.A. 1969, Vol. I p. 179, and *Canadian Farm Economics*, various numbers.

Tobacco growing “Rights” attach to land so that the only means of entry to the industry or expansion of acreage is by the purchase of land. Acreage allotments or the acreage each grower is permitted to grow in any year is regulated very stringently. Allotments are expressed as a percentage of the “basic marketable acreage” on which tobacco may be grown. This percentage is varied from year to year on the basis of estimates of domestic demand and of export negotiations between the Ontario Board and the Tobacco Advisory Committee of Britain. These negotiations have become more important since sanctions were imposed on Rhodesia. The Federal Department of Industry, Trade and Commerce exercised considerable influence in such negotiations. Discussions are also held with domestic manufacturers. During the 1960's the acreage of flue-cured tobacco grown in Ontario has varied from 73,000 to

128,000 acres. In recent years the Ontario Board has permitted transfer of annual acreage allotments from one farm to another when the land was held under common ownership. Thus tobacco has been shifting to more productive land, hence strengthening the economic position of the industry.

The acreage control has been so severe that land with "Rights" attached has become very valuable. "It was found that buyers offered and paid prices for tobacco farms ranging from \$2,000 to \$3,000 per acre of tobacco 'Rights' "¹. This may be compared with prices of around \$300 per acre for land without "Rights". These exceedingly high land values enter the cost structure and have in an important way increased production costs. Production control has also affected the combination of resources. To maximize returns per acre on the limited acreage farmers have increased the use of fertilizer and most of them now use irrigation to guarantee yields. These returns increased by about 50 per cent in the 1960's, reflecting changes in inputs and general technological advance. Again, these intensive practices lead to higher unit cost.

PROBLEMS OF THE INDUSTRY

A major problem of the industry centres on tobacco consumption and particularly on governmental attitudes and proposals aimed at reducing the use of the product for health reasons. The House of Commons Committee on Health, Welfare and Social Affairs released a report which will almost certainly become the basis for legislation. The report proposes a freeze on tobacco promotion expenditures, a ban on the use of broadcast media and phasing out all advertising and promotion over a four year period. The Federal Minister of National Health and Welfare has repeatedly warned about the health hazard in using tobacco. A health hazard warning may be required on all cigarette packages.

Per capita consumption of cigarettes grew slowly from 1,939 per year in 1959 to 2,316 in 1967 but dropped by three per cent in 1968. In 1969 per capita consumption again moved ahead. Nevertheless, the increased use of filter cigarettes has brought a reduced demand for flue-cured leaf tobacco. Domestic demand for leaf tobacco has apparently stabilized temporarily at two to four million pounds below the 1967 level. Barring further and unforeseen pressure by government against smoking, it is the judgment of the Task Force that domestic demand will be fairly stable until 1980. The imposition of new taxes, feared by the industry, could lead to a further decline in demand for leaf.

A second industry problem centres on the Ontario producers becoming increasingly high-cost growers. This becomes more critical with the pace of inflation and as a result of emphasis which the Ontario Board places on limiting total output through acreage restrictions as a means of achieving higher prices. There is growing dissatisfaction among export buyers of

¹ G. I. Trant, *Production Opportunities on Ontario Tobacco Farms*, University of Guelph 1966, p. 20.

Canadian tobacco with the high prices of the past four or five years and some complaint about quality. Britain reduced her target import by five million pounds in 1969; the British Advisory Committee has indicated that the import target from Canada for 1970 may be reduced by a further four to nine million pounds. Britain's action is important because of Canada's dependence on the British market—over the years 1966-68 more than 90 per cent Canadian flue-cured exports went to Britain.

Canada has virtually lost her tobacco market in Western Europe, the most important import consuming area in the world. This market took 7.6 million pounds in 1962 and 5.5 million pounds in 1963. The 1968 exports to Western Europe were just over one half a million pounds. Farm prices in 1969 were somewhat lower than those of the previous two years and some markets on the Continent have been recovered but lost markets are difficult to regain. It is generally conceded that Canada, with short supplies, lost opportunities for developing export outlets when Rhodesian tobacco sales came under sanctions. The return of Rhodesia to the British market could have serious consequences for Canadian exports. The current tobacco policy negotiations within the European Economic Community could further limit the access of tobacco from North America to that area. The prospect of British entry into the E.E.C. threatens continued large exports to Britain under Commonwealth preference. Reflecting these situations, the Ontario Board in 1969 adjusted its crop planning policy to provide additional acreage for new market development and for an attempt to win back lost markets in Britain and Western Europe.

The continuing substantial stockpiles held by the United States Government represents another unfavourable factor. All exports from the United States are subsidized by five cents per pound and about 20 per cent of United States tobacco exports are made under other special government assisted programs.

Within Canada the successful introduction of flue-cured tobacco in the Maritime Provinces constitutes a threat to the Ontario production control and price maintenance scheme. The Maritime acreage in 1969 was 3,135; double the acreage of the previous year. On the basis of land suitable for tobacco production, acreage in the Maritime could increase to three, four or more times the 1969 acreage. The Maritime area has the advantage of low-valued land and the absence of restraints on production.

The use of marketing board powers or supply management by the Ontario Flue-cured Tobacco Growers' Marketing Board raises questions of concern beyond the tobacco industry. Production controls under authority granted by a provincial legislature have virtually excluded new entrants to the industry and thus reduce the opportunity for efficient farm managers to produce tobacco. Furthermore, the Ontario Board likely operated in such a way as to reduce the export earnings of agriculture, especially when growers chose to underplant their allotted acres. It has operated in a short-run context, losing sight of long-run considerations. The production control program has brought serious problems to tobacco farmers themselves. Capitalization of the value

of "Rights" into land values raises costs² and acreage restrictions lead to an inefficient use of resources. High prices are required to meet rising costs. But to a great extent the rising costs are a result of the production control program. Thus they are quite different from the rising costs to which all sectors of agriculture are subject, nevertheless the tobacco industry is equally subjected to general inflationary forces.

The Task Force concludes that present land values in the Ontario industry cannot be sustained regardless of the way in which the production controls are administered and that the severity of the use of production controls has been contrary to public interest. Furthermore, the great emphasis on the domestic and British markets and generally treating the other export markets as residual, are not consistent with the interests of the industry itself.

RECOMMENDATIONS

The Task Force therefore recommends that:

1. Tobacco growers, processors and manufacturers, the federal government and interested provincial governments join in the creation of a tobacco export development fund. This would support an aggressive export trade development program. Intensive exploitation of export market opportunities, involving the use of trade missions, trade fairs and where advisable, the use of export subsidies in a market development context, should be used.
2. The Ontario Flue-cured Tobacco Growers' Marketing Board reduce the "basic marketable acreage" of growers who under-plant allotted acreage. Such basic acreages accruing to the Board could be sold on a tender basis.
3. The Ontario Board should continue, on a permanent basis, the provision in its program which now permits transfer of acreage allotments from less productive to more productive areas.
4. Maritime growers should form an organization which would permit a "check-off" to allow participation in the export development fund operations.
5. Maritime growers should take the action necessary to insure that primary processing facilities are available in that region.
6. Intensive research into the production and manufacture of tobaccos that can be readily marketed under the demand conditions, including consideration of effects on health, of the 1970's be undertaken and supported by government, the manufacturing industry and tobacco growers.
7. A Federal government inter-departmental committee be created to make a continuing assessment of the effect of anti-tobacco activities of the Federal government, and consider a program of adjustment assistance for the industry, if required.

² See Appendix to Chapter 12.

PART B—SUGAR BEETS

INTRODUCTION

A very large proportion of the sugar consumed in Canada is imported as raw cane sugar as the Canadian sugar refineries are protected by a high tariff on refined sugar. Only about 15 per cent of Canadian sugar consumption is supplied from domestic sugar beets, which are protected by a prohibitive (27.5 per cent *ad valorem*) tariff and heavily subsidized by deficiency payments under the Agricultural Stabilization Board. The evident question is, what purpose the high levels of protection and subsidies achieves and whether the costs to Canadian consumers, taxpayers and industrial users of sugar are justified.

THE SUGAR BEET PRODUCING SECTOR

While only 15 per cent of the national sugar consumption is supplied from sugar beets, the amount varies from region to region. The Prairie market is largely supplied by beet production located in Alberta and Manitoba; British Columbia and Eastern Canada are almost entirely supplied from imported raw cane sugar, refined in Canada. There is little competition between regional market suppliers. Transportation costs from either the East or West Coast areas afford "protection" to the Prairie beet industry. In contrast, Quebec growers, just a few miles from large cane refineries, which are located near East Coast seaports, are exposed to direct competition with them.

Sugar beets are grown in Alberta, Manitoba and Quebec and processed by factories located in these provinces. The small Quebec factory is government-owned. Sugar beets were grown in Ontario until 1967 but production ceased with the closing of the Chatham factory by Canada and Dominion Sugar in early 1968. Beets are normally grown under a contract signed between grower and company before the beets are planted. Without specifying an explicit price, the contract defines the basis for farmer participation in factory returns from refined sugar, beet pulp and molasses. Data on numbers of growers (1966) and acreages in recent years are presented below:

TABLE 1
Growers and Acreages, Sugar Beets, Canada Selected Data

Province	No. of Farms	Acres	
		1962-66	1968
Quebec.....	927	9,808	11,381
Ontario.....	566	14,216	—
Manitoba.....	542	25,689	29,079
Alberta.....	971	39,788	39,206
Canada.....	3,006	89,501	79,666

SOURCE: *Canadian Agricultural Outlook Conference*, C.D.A., 1969 Vol. I, p. 176.

Production averaged 1.2 million tons in the 1962-66 period and was 1.1 million tons from the 1968 crop. There were 3,006 producers in 1966. Most of them have important acreages of other crops and find sugar beets very useful in crop rotations.

The acreage devoted to sugar beets has been in gradual decline since 1958, yet in that year the crop became eligible for price support. Deficiency payments have been made each year except in 1963 and 1964 when record high world sugar prices prevailed. The ten year decline has occurred despite the substantial size of the total deficiency payments relative to the size of the commodity sector. In 1967, \$6.3 million were paid to 3,275 growers, an average of \$1,924 per grower, not counting approximately \$2 million paid as adjustment assistance to Ontario growers following the closing of the Chatham factory. The above data do not take account of the substantial annual losses involved in the operation of the Quebec beet sugar refinery, which losses are in effect a subsidy to producers. Further, irrigation water is highly subsidized in Alberta, as are the transportation and housing of the field labour.

Table 2 presents data on the extent of federal participation in the beet sugar industry. The government announces the level of support each year, as a percentage of the average farm price in the previous ten years. It then makes up the difference between prices paid by processors and the support level by means of a deficiency payment based on a formula including the world price and the sugar content of the beets.

TABLE 2
Support Level and Average Returns for Sugar Beets 1959-60 to 1967-68

Year	Percentage of previous 10 years	Support Level	Returns from Processors	Federal Payment ¹	Total Returns
(dollars per standard ton ²)					
1959-60.....	93	93 per cent	11.62	2.51	14.13
1960-61.....	100	14.23 per 270 pounds	11.77	1.40	13.17
1961-62.....	102	13.18 per 250 pounds	11.62	1.93	13.68 ³
1962-63.....	106	13.72	18.64	—	18.64
1963-64.....	109	13.72	18.73	—	18.73
1964-65.....	104	13.72	11.62	3.15	14.77
1965-66.....	104	14.35	10.78	6.38	17.16
1966-67.....	105	14.35	11.00	4.83	15.83
1967-68.....	114	15.50	10.64	5.41	16.05

¹ This subsidy was 3.23 on the 1968-69 crop.

² Equivalent to 250 pounds of refined sugar.

³ Ontario also paid a small subsidy on the 1961 crop, and Quebec has paid a subsidy of two to three dollars for several years.

SOURCE: *Canadian Agricultural Outlook Conference, C.D.A., 1969, Vol. 1, p. 176*

The Task Force was informed but unable to confirm, that new production methods could make sugar beets competitive with cane sugar without the use of subsidies. If this were the situation it would make the continuance of federal subsidies unnecessary.

The question is whether such subsidies and protection are justified. They do not have the effect of protecting the Canadian consumer from occasional high world prices, as in 1963 and 1964 when the Canadian retail price averaged from 14 to 16 cents per pound. Canada could become self-sufficient in sugar should a crisis occur in world trade but only at a very high cost. Sugar beet producers are highly non-competitive at current and envisaged world price levels. Therefore the Canadian consumer and taxpayer have heavily subsidized a non-competitive industry for doubtful benefits.

THE SUGAR REFINING INDUSTRY

The sugar refining sector consists of 13 establishments. The major firms are Canada and Dominion Sugar Company Limited, the B.C. Sugar Refinery Limited, Atlantic Sugar Refineries Company Limited, St. Lawrence Sugar Limited, and the Cartier Refined Sugars Limited. Production of refined sugar in the 1962-66 period averaged 1,920 million pounds annually; and in 1968 was 2,088 million pounds. Consumption per capita in all forms is quite stable at slightly over 100 pounds per year.

The industry appears to be very profitable, with net earnings about one-sixth of sales. The profitable situation results in part from a tariff structure under which the British Preferential Duty on raw sugar is 31 cents per 100 pounds while refined sugar has a duty of \$1.09 per 100 pounds British Preferential and \$1.89 Most Favoured Nation. Imports of refined sugar are effectively excluded by the tariff and the refineries appear to take full advantage of this. There is also limited competition among domestic sugar refineries. The eastern Canadian cane sugar refiners were fined on conspiracy charges in 1963 under the Combines Investigation Act. In 1969 the Tariff Board was requested to make a broad inquiry into the tariff structure on sugar, into refined sugar prices, into refiners' margins and into the Canadian beet sugar industry.

INTERNATIONAL PROBLEMS

Sugar beets are the most elaborately protected and subsidized of all world agricultural products. In a freely competitive market most and likely all of the world beet sugar industries would be wiped out. Nevertheless national defense considerations (of little or no value in the Canadian sugar beet situation) and unalloyed agricultural protectionism have given sugar beets about 40 per cent of the world market. Denial of this large part of the market to the developing countries which are and/or could become efficient producers of cane sugar has seriously retarded their development.

Attempts to limit subsidization of beet sugar producers and assure more stable markets for cane producers have been made for nearly 70 years. But these efforts have been largely frustrated by the development of four prefer-

ential arrangements. These include (1) American imports under the Sugar Act. Six foreign countries have quotas each in excess of 100,000 tons; and another 25 have small quotas; (2) the British special arrangements for Commonwealth members; (3) the African and Malagasy sugar agreement; and (4) the Cuban-Comocon special arrangements. These four cover about one-half of the 16-17 million metric tons of world commerce in cane sugar and each provides for prices higher than those prevailing in the free market.

Only at the beginning of 1969 did 12 importing countries, including Canada, and 33 exporting countries implement a new International Sugar Agreement. This Agreement is referred to as free market or residual since it leaves sugar under the four arrangements named above untouched. It is nevertheless a really serious attempt to stabilize world trade in sugar not covered by the four arrangements. The market for free sugar had been chaotic with prices frequently falling below the costs of production of the most efficient producing countries. As an illustration of sugar pricing, it is estimated on the basis of International Sugar Council statistics for 1967 that Australia received 7.1 cents per pound for quota sugar shipped to the United States, 5.9 cents for quota shipments to Britain, and about three cents for sugar sold in markets where no "agreement" was in effect.

The Agreement provides for variable export quotas for producing countries and a program to stabilize world sugar prices between 3.25 cents and 5.25 cents per pound (U.S.) f.o.b. Caribbean ports. Export quota adjustments which apply at various levels of the world price are the major instrument for maintaining price stability. The Agreement contains assurance of supplies to importing member countries at the price of 6.5 cents when the world price exceeds that level. In the sense that the agreement results in an increase in the duty paid, price of Canadian imports of raw sugar of one to two cents per pound, it will mean that beet growers will be able to secure a larger part of their returns in the market and presumably less from the Federal government by way of subsidy.

The Agreement does not include the E.E.C. which refused to sign when other countries would not accede to the E.E.C. demand for an export quota of 1.2 million metric tons. While the fact that the E.E.C. is not a signatory is of some concern, it is unlikely that this bloc will be able to find export markets for sizeable quantities of sugar. A further limitation rests in the fact that Canada may have to turn to non-Commonwealth (and thus higher duty) sources for a larger proportion of her sugar.

POLICY ISSUES

Judged by the levels of protection and subsidies used for sugar beet farmers in almost all temperate climate countries, Canada's programs are relatively modest. However, the Task Force takes the position that to permanently support a very small sector of agriculture with relatively large treasury outlays per farm is not in the national interest, especially when benefits to the country are marginal. With any effective attack on the price of refined sugar, beet growers would be unable to secure as large a part of their income through the market. Without anticipating the results of the Tariff Board

inquiry, we would point to the substantial gains to the Canadian consumer which would come as a result of a one cent price reduction for refined sugar through a reduction of the tariff. The position of beet sugar growers should not be a barrier to the realization of large possible national gains. It is concluded that if the industry is to have a future that it must be structured in such a manner as to realize every possible efficiency in production and also stress the obligation of the government to Canadian consumers and in providing expanding markets for the sugar of the developing countries.

RECOMMENDATIONS¹

The Task Force agreed to inclusion of the foregoing description of the Sugar Beet Industry in this Report but could not reach a consensus on conclusions and recommendations. Professor MacFarlane dissented and his recommendations are shown in footnote 1 below.

¹ Recommendations for the Sugar Beet Industry proposed by Dr. MacFarlane:

- (1) That the Federal government limit deficiency payments to growers who have received them in a recent period; and that payments to any grower be limited to production by that grower in a recent past period, except as in (2);
- (2) the Federal government be authorized to buy existing rights to deficiency payments. This would parallel the adjustment assistance payments made to farmers when the beet sugar factory in Chatham, Ontario was closed. The government would be authorized to sell or allocate such rights to deficiency payments in such a way as to improve the structure of the sugar beet sector;
- (3) the level of deficiency payments be gradually scaled down as the industry re-structures toward fewer, larger-scale, more efficient production units.

chapter ten

AGRICULTURE IN 1980—A MATERIALS BALANCE APPROACH

INTRODUCTION—AGRICULTURE IN 1980

In the course of its work the Task Force found itself grappling with many problems—the wheat surplus, the fact of poverty—analyzing many interrelated programs, and making proposals (first tentative and then final) for changes in all sectors. What gradually became apparent was that it was absolutely necessary to attempt to put together in one series of tables a summary of the kind of agriculture which Canada would be likely to have in 1980, given the kinds of changes in technology, markets, and institutions which one could reasonably expect and given, too, the various policies which the Task Force was recommending for wheat, beef, dairy and so on. This chapter is an attempt to do just that.

The heart of our materials balance approach is to be found in Tables 1 to 9. There we have summarized Canadian consumption estimates, drawn together the likely results of our proposed policies and of economic forces, and examined the levels of output, exports, imports and the allocation of land resources in Canada in 1980 for the major products.

Strangely enough, no one seems ever to have done this exercise before. Yet it is essential if one is to judge the consistency of proposals and take into account the interrelatedness of sectors and policies affecting them. It should be one of the duties of the new planning unit of the CDA Economics and Business Branch to prepare annually such a series of predictive tables. The picture that emerges from them is partly descriptive—what the authors think will happen—and partly prescriptive—what they want to have happen through the force of government programs. It should not be thought however,

that governments in our kind of society can make these predictive tables come true, because production decisions are made, after all, by producers, and consumption decisions by consumers, and processing decisions by agribusiness and import decisions by non-Canadians.

Closely related to the materials balance approach and to all the projections which are involved in it are implicit assumptions about the structure of farming, how many farms there will be, their variations in size and regional location, their variations in capital employed and so on. The structure of farming by 1980 will have changed drastically from that of 1969 just as it has between 1959 and 1969. We devote the final section of this chapter to the Changing Structure of Farming, and in Table 11 we estimate farm cash receipts in 1980.

A. A MATERIALS BALANCE APPROACH¹

The Role of Government in 1980 as at present, should be to provide a satisfactory economic climate for farmers and agribusiness. This means high rates of employment in the entire economy, the provision of certain services or assistance to farmers and agribusiness and direct (non-market) assistance to those in poverty. It does not mean a paternalistic approach, nor "directing" nor "managing" agriculture. Yet, the kind of assistance and services government provides will inevitably influence the shape and size of the industry.

Farmers will remain independent decision-makers, sometimes combining in collective bodies for common purposes but always free to decide to disband such bodies and make their own decisions independently. Growing specialization and investment will make farmers increasingly vulnerable to crop, price and financial hazards and will produce a modest but growing willingness to accept limitations to their autonomy in return for greater stability and security of prices and incomes.

Agribusiness will continue to experience a winnowing-out of the inefficient and the unlucky at a rate almost as rapid, in many sub-sectors, as their counterparts in farming. There will be more joint involvement of farmers and agribusiness in marketing commissions, in advisory committees and in Canada Grain Councils. There will also be more attention paid by governments particularly by Departments of Agriculture to the economic health of agribusiness.

Exports and imports will be less fettered by tariffs and quotas but probably more affected by short term *ad hoc* actions such as the application of "value for duty". The Task Force emphasizes the desirability of Canada taking the initiative in attempting to create a continental market with the United States for grains, oil seeds, potatoes and livestock. Such a development would emphasize the importance of efficiency at three levels: by farmers; by agribusiness (both in supplying inputs and in processing, packaging and promoting); by governments in providing the desirable climate for informed

¹ The following pages must be read in careful conjunction with Tables 1 to 9 if they are to be fully meaningful.

decision-making by farmers and agribusiness. Another implication of a common continental market is that all inputs by agribusiness and farmers should be tariff-free.

Red meat consumption in Canada will increase rapidly, providing one of the really bright spots in an otherwise sombre picture. Projected consumption (Table 1) will rise for all red meats but per capita consumption is sure to rise only for beef and perhaps for pork². The Task Force believes Canadian producers will satisfy all the domestic demand for red meat in 1980 except for lamb and mutton. The number of sheep has been declining and is likely to continue to do so. The projections in Table 2, Column 3, show there will be no net exports or net imports, except for feeder cattle exports and sheep and lamb imports.

Poultry meat consumption, especially of turkeys, will continue to rise rapidly, (Tables 1 and 2). The Task Force assumes there will be no net exports or imports of poultry meat in 1980. The assumption may be optimistic, given the more rapid reduction in the industry's cost in the United States. If provincial or national marketing boards in Canada are unwise enough to follow restrictionist policies which prevent costs from falling then there will be imports in 1980.

The Task Force recommends that the present level of tariffs be retained for broilers and turkeys. No increase is justified or beneficial. There is some danger that low-cost American production will cause trouble to part of the Canadian industry. Part of the differential in costs arises from climate—that we cannot change. Part arises from feed costs; our proposals on feed grain marketing and corn tariffs will help to reduce this differential. Part arises from differences in organization of the entire industry. If governments or producer organizations refuse to permit changes which economic forces dictate, then Table 2 Column 3 will show a substantial deficit figure in 1980.

Egg consumption on a per capita basis is likely to continue to fall as in the past and All the King's Horses are unlikely to change this trend. The production cost and tariff statements relating to poultry production, in the preceding paragraph, apply just as well to eggs.

Milk consumption per capita (all forms) has been falling for many years. Projections in Table 1 assume a continuation of this downtrend. The dairy industry shares with wheat production a prospect as gloomy as any farm sector. Because of the population increase domestic total milk consumption is increasing very slowly. The major form of utilization, butter, is shielded from sales competition to some extent by a 12 per cent tax on margarine (the only food product taxed) while producers of butter are shielded from foreign competition by a complete embargo on imports. There are very few other farm products which are protected by embargoes. (It is true that imports of wheat, oats and barley are licensed by the Canadian Wheat Board but Canadian grains are normally competitive in price). The highest priced milk

² Professor Marshall of the University of Guelph expects per capita consumption of pork to be at least 55 pounds in 1980. This is reasonable compared to a consumption average of 53.7 pounds in 1967 and 1968. In Table I however, the more conservative forecast of 50 pounds per person is used. Consumption in 1969 is likely to be just under 50 pounds per person.

product—fluid milk—could experience serious repercussions from improvements in filled and synthetic milk but probably not before 1972 or 1973.

It is assumed that Canadians will consume almost 20 billion pounds of milk in one form or another by 1980 (Table I). The dairy industry will have gone through dramatic changes and shake-up. The number of milk cows will fall from 2.8 million in 1964-66 to about 1.67 million in 1980 (there were 2.58 million in 1969) and output per cow will have to achieve an average of 9,000 pounds per cow if the sector is to be viable. This is a faster rate of

TABLE 1
Per Capita and Aggregate Consumption, Canada, 1964-66 and Projected 1980

	1	2	3	4
	Consumption		Output per head	Animal equiv. consumed
	Per capita	Aggregate		
	(lbs.)	(million lbs.)	(lbs.)	(thous. head)
<i>Average 1964-66</i>				
Beef.....	81.0	1,592	527.7	3,149
Veal.....	7.4	145	124.6	1,177
Pork.....	49.6	975	127.7	8,134
Lamb and Mutton.....	3.3	65	43.8	1,484
Other meats.....	8.0	157	—	—
Poultry (evisc.).....	37.1	729	4.0	181,962
Eggs (fresh equiv.).....	31.7	623	199.0 eggs	—
Milk (all forms).....	901.7	17,527	6,500.0	—
<i>Projected 1980</i>				
Beef.....	100.0	2,605	555.0	4,795
Veal.....	6.9	180	135.0	1,364
Pork.....	50.0	1,302	127.0	11,380
Lamb and Mutton.....	3.3	86	43.0	2,000
Other meats.....	8.0	208	—	—
Poultry (evisc.).....	49.0	1,276	4.2	306,758
Eggs (fresh equiv.).....	28.7	748	220.0 eggs	—
Milk (all forms).....	765.0	19,928	9,000.0	—

Derivation: “Demand—Supply projections for Canadian Agriculture—1980” (hereafter called “DSP”) by Yankowsky, Shefrin & Cavin, Canada Department of Agriculture, Ottawa, 1968.

(1) Col 1 from DSP, Page 13

(2) Col 2 from DSP, Page 14

(3) Col 3 from DSP, Page 63

(4) Col 4 from DSP, Page 40

(5) Cols 3 & 4, “Other Meats” pro-rated among beef, veal, pork, poultry

(6) Col 4. “Lamb and Mutton” corrected from DSP

(a) 1964-66—1484 instead of 581

(b) 1980—2000 instead of 2100

(7) Col 3, 1980, “Milk” increased from 8,500 pounds per cow in DSP to 9,000 pounds, given projections in these tables of decline in Canadian milk production.

decline in number of cows and faster rate of increased output per cow than experienced in the sixties. The economic forces of the market and the changes proposed by the Task Force will make Canada less than self-sufficient in dairy products, producing about 15 billion and consuming almost 20 billion pounds of milk in all forms in 1980.

Feeder cattle production has an important economic place in the Task Force's projections of things to come. Exports of 500,000 feeder cattle per year to the U.S.A. are projected for 1980 (Table 2). This is a reasonable

TABLE 2
Animals: Consumed and on Farms, Canada 1964-66 and Projected for 1980

	1	2	3	4	5
	Animals on farms 1 June				
	Animal equivalents		Net Exports 1980	Average 1964-66	Req'd. in 1980 (for cols 2 and 3)
	Consumed av. 1964-66	Consumed 1980			
	(thousand head)				
Cattle.....	3,149	4,795	500	6,498	10,350
Calves.....	1,177	1,364	—	3,579	4,160
Milk Cows.....	—	—	—	2,822	1,667
Hogs.....	8,134	11,380	—	5,386	7,400
Sheep and Lambs.....	1,484	2,000	—1,790	1,153	420
All Poultry.....	(181,962)	(306,758)	—	(77,115)	(111,325)
Hens and chickens.....	165,781	277,878	—	42,889	69,470
Turkeys.....	14,818	26,460	—	7,569	13,230
Layers.....	—	—	—	25,974	27,415
Other poultry.....	1,363	2,420	—	683	1,210
Horses.....	—	—	—	403	200

Derivation:

- Cols 1 and 2 from DSP, Page 40 (Corrected for sheep and lambs as indicated in Footnote 6 Table 1)
- Col 3. Estimated export of 500,000 feeder cattle per year to the United States and imports of an equivalent 1,790,000 sheep and lamb carcasses per year. There will be exports and imports of the other products but they should be offsetting.
- Col 4. from DSP Page 41.
- Col 5. from DSP, Page 41. Cattle: the DSP 1980 figure of 9,260,000 makes no provision for exports of feeders; a provision to export 500,000 is included which increases Col 5 by 1,090,000 to account for 500,000 feeders and 590,000 additional beef cows and replacements required to produce these feeders.

Milk cows—The DSP projections assume that almost all Canadian dairy consumption would be met by domestic production (see DSP Page 39). If dairy subsidies are reduced before 1980, Canadian production will be reduced; the Task Force assumes Canadian production of 15 billion pounds of milk by 1,667,000 milk cows averaging 9,000 pounds of milk per cow. "All Poultry" total corrected from 110,690 in DSP to 111,325.

TABLE 3

Number of Forage-Consuming Animal Units on Farms Canada 1964-66 and Projected 1980

	1	2	3	4
	Average Numbers 1964-66	Forage- Consuming Animal Units 1964-66	Projected no. 1980	Forage- Consuming Animal units 1980
		(thousand head)		
1 Beef cows.....	2,882.9	2,882.9	5,332	5,332
2 Bulls.....	217.5	217.5	175	175
3 Milk cows.....	2,697.3	2,697.3	1,667	1,667
4 Steers and heifers.....	2,613.6	3,064.0	4,843	4,502
5 Calves.....	3,515.0		4,160	
6 Sheep.....	1,136.7	189.0	420	70
7 Horses.....	407.0	407.0	200	200
8 Total.....	—	9,458.0	—	11,946

Derivation:

—Col 1 from *Canadian Livestock and Animal Products Statistics*, 1968, Cat. No. 23-203 DBS.—Col 2 from Col 1 \times 1 animal unit for each mature cow or horse and \times 1/2 for steers, heifers and calves and \times 1/6 for sheep.

—Col 3 from Table 2 Col 5 above. The ratio of "beef cows" to "steers and heifers" is taken to be as in Col 1.

—Col 4 from Col 3 and same conversion factors to animal units as with Col 2 of this table.

figure from the demand side: higher incomes increase consumers' want for beef. Any beef shortages in the United States will not be the result of a shortage of grains needed for feeding but of a shortage in the resources necessary for producing feeder cattle. An export of 500,000 is a reasonable figure viewed from the supply side. Acres which have been used to produce wheat that cannot be sold will be diverted to pasture, providing feeders that we can sell. Some farmers in Eastern Canada who have been producing milk will change their operations to produce feeder cattle along with other products.

Land use in non-prairie regions will undergo no dramatic change by 1980 (Tables 5 and 7). Total acreage cropped is likely to decline slightly; oats will fall but barley will rise. The most important single land use change outside the prairies will be the continued increase in grain corn acreage especially in Ontario. Forage corn acreage will continue to expand (Table 9, Row 12) but not so rapidly as grain corn.

Wheat will no longer be king on the prairies; cattle will have exceeded it, and oilseeds and other grains will be challenging it. By 1980 Canada will have adjusted to the inevitable, that wheat acreage and output must be greatly reduced in the light of subsidized production and tariff protection by other industrial states, long overdue attention to agriculture in socialist states, new varieties and a dawning agricultural revolution in less developed coun-

TABLE 4
Acreages in Forage, Canada, 1966 and Projected Requirements 1980

	Acres 1966	Required for 1980 (1966 proportions)	Increase 1966 to 1980
		(thousand acres)	
Tame hay.....	13,162	15,800	2,638
Tame pasture.....	10,942	13,130	2,188
Fodder corn.....	590	710	120
Fodder oats.....	1,219	1,450	231
Other.....	464	560	96

Derivation:

- Col 1 from *Census of Agriculture*, 1966.
- Col 2 equals Col 1 increase by 27 per cent to meet the 27 per cent increase in number of forage consuming animal units (See Table 3 Row 8 in which Col 4 exceeds Col 2 by 27 per cent) and then decreased by 5.5 per cent for an assumed 5.5% increase in productivity. Thus in Table 4, Col 2 is 20 per cent greater than Col 1. (127%—5.5% of 127 equals 120%).
- An implicit and questionable assumption is that all forage acreages would increase by the same proportion and that productivity would increase by 5.5 per cent in each case. The Task Force expects the increase of 4.8 million acres of hay and pasture will occur on the prairies and expects two-thirds of the increase to come from the conversion of land that is presently cropped. This land is of higher productivity than much of the existing forage lands.

tries. Table 8 shows the Task Force prediction of about 360 million bushels³ going into export in 1980 and consumption in Canada by humans and livestock amounting to about 70 million each. Take into account the increases in yield that are likely and wheat acreage should be just under 20 million acres in 1980. (Table 8 Rows 7 and 8). To achieve the predicted exports Canada will have to introduce protein grading, give wheat in foreign aid and above all be fully competitive in price.

Barley will be one of the three crops taking up the slack caused by the decline in wheat acreage. More barley will be fed to the growing Canadian livestock population and much much more will be exported, (Table 8 Row 2); we project exports of 100 million bushels in 1980 compared with 30 or 40 million in the sixties. The increased exports will come about only with a new orientation and new institutional arrangements, discussed in detail in Chapter 5, "Wheat, Feed Grains and Oilseeds".

Rapeseed shows signs of being the new wonder crop on the prairies. The danger is that in 1970-71 with "non-CWB-delivery grain" selling at 40-50 cents per bushel and rapeseed selling at \$2.50, (with yields not far short of

³ In a materials balance approach or indeed in any approach to Canadian agriculture, projections concerning wheat exports are central. As was emphasized in Chapter 5, "Wheat, Feed Grains and Oilseeds", the projection of exports totalling 360 million bushels by 1980 arises from a consideration of many economic and political factors over which Canadians have no control. Therefore the level of actual exports may differ considerably from what now seems the most likely figure.

TABLE 5
Acres and Output of Grains, Non-Prairies, Estimated 1969 and Projected 1980

	1	2	3	4	5	6
	1969			1980		
	Acres	Yield	Prod.	Acres	Yield	Prod.
	(000)	(bu/ac)	(000 bu)	(000)	(bu/ac)	(000 bu)
<i>Maritimes</i>						
Oats.....	164	49	8,070	135	50	6,750
Barley.....	37	45	1,660	45	47	2,115
Mixed gr.....	81	50	4,090	100	50	5,000
Sub-Total.....	282	—	—	280	—	—
<i>Quebec</i>						
Oats.....	975	42	41,050	850	44	37,400
Barley.....	24	38	890	20	40	800
Mixed gr.....	94	41	3,890	110	45	4,950
Corn.....	45	85	3,820	100	90	9,000
Sub-Total.....	1,138	—	—	1,080	—	—
<i>Ontario</i>						
Oats.....	810	53	43,170	540	55	29,700
Barley.....	315	50	15,690	420	55	23,100
Mixed gr.....	855	58	49,500	540	60	32,400
Corn.....	930	72	66,870	1,400	100	140,000
Winter wheat.....	360	41	14,690	350	45	15,750
Soybeans.....	322	24	7,600	300	—	—
Rye.....	60	26	1,580	50	26	1,300
Sub-Total.....	3,652	—	—	3,600	—	—
<i>British Columbia</i>						
Oats.....	76	51	3,900	90	50	4,500
Barley.....	160	33	5,300	210	35	7,350
Mixed gr.....	6	51	280	30	52	1,560
Wheat.....	160	24	3,800	170	25	4,250
Sub-Total.....	402	—	—	500	—	—
Total.....	5,474	—	—	5,460	—	—

Derivation:

Data for 1969 (Estimated) from *Field Crop Reporting Series* Cat. 22-002 Sept. 1969 DBS. Projections for 1980 are estimates based on recent trends and the acceptance of Task Force proposals in regard to grain marketing, feed freight assistance and dairy pricing. A total of 170,000 acres of wheat are included in British Columbia in 1980 because this seems more likely to be the case than a more desirable alternative—that of reducing wheat acreage in favour of forages in this area.

wheat) there may be such a scramble into rapeseed production that its development may be undermined for several years. Rapeseed is the international challenger of soybeans which now earn more foreign exchange than any other American agricultural export. Its oil is interchangeable with other vegetable oils and its meal so improved as to pose no real problems for modern feed manufacturers. Improved varieties and higher yields permit rapeseed prices to fall to levels at which it can compete anywhere with soybeans or other oils and meals. The Task Force estimate of 5.5 million acres in 1980 may be conservative (Table 9, Row 9).

Hay and Grass on the prairies are necessary to raise the extra cattle if farmers are to supply 100 to 110 pounds of carcass beef to every Canadian in 1980 and export 500,000 feeders to the United States. Along with barley and rapeseed, hay and grass provide a productive use for those acres which must be diverted from wheat. The Task Force foresees an increase of 5.5 million acres of tame hay and tame pasture on the prairies between 1966 and 1980 and a total increase in improved crop acreage of 1 million acres. Thus, given a constant summerfallow acreage, almost 4 million acres will have shifted from grain crops to forage in 14 years. This is a feasible target.

TABLE 6
Grain Consumption by Animals, Projected for 1980

	Animals 1 June	Grain consumed per animal	Total grain fed (col 1 × 2)
	(thous. head)	(tons)	(thous. tons)
Milk cows.....	1,667	.9	1,500
Other cattle.....	14,510	.46	6,675
Hogs.....	7,400	.78	5,770
Sheep and lambs.....	420	.036	15
Horses.....	200	.45	90
All poultry.....	111,325	.049	5,450
Total.....	—	—	19,500

Derivation:

- Col 1 from Table 2 Col 5.
- Col 2 is drawn from the *Quarterly Bulletin of Agricultural Statistics*, Oct–Dec. 1968, Page 249. Estimates of grain consuming animal units per head of each type of livestock (Milk cows = 1; other cattle = .51; hogs = .87; sheep and lambs = .04; horses = .5; poultry = .045) are based on numbers on farms on June 1. Because of trends in the poultry industry whereby 5 crops of broilers per year rather than 4 are becoming common and whereby turkey output is increasingly a year-round operation, the past ratio of numbers on farms at one time (June 1) to yearly output and thus to grain input appears to be low. Consequently the number of animal units per head of poultry was increased from .045 to .055. Recent experience indicates a consumption of about .9 tons of grain (not including protein supplement) per animal unit. This amount has been increasing slowly. The data of Col 2 represent animal units per head x .9 (e.g. hogs = .87 x .9 = .78; poultry = .055 x .9 = .049).

Land clearing on the prairies and in northern British Columbia has been encouraged by the provincial governments, by ARDA, by the Wheat Board quota policy and by income tax deductions on such expenditures. While there may be some justification for ARDA assistance to occasional individuals to expand their operations by land clearance, farm consolidation seems more desirable in principle. It is ironic that the acreage of improved land on the prairies has increased by 1 million acres per year while grain was backing up into the present record inventory position. It is inconsistent to offer acreage diversion payments to convert grain acreage to grass without simultaneously amending those programs which result in increased "improved acreage". Accordingly, the Task Force projects only one million additional acres in grains, oilseeds and forage on the prairies by 1980 compared with 1966.

Soybeans will continue to be produced in Ontario only and probably on a slightly smaller acreage than at present, given the profitable alternative crops and the growing competition of rapeseed in oil and meal markets.

The Poor are always with us in any sector but in the case of farming they have been more than usually prevalent. The competitive structure of farming, the rapidity of technological change, the impact of subsidized and protected production in other countries—all of these will be present in 1980 and will then, as now, produce people with poverty-level incomes. There will however be better techniques for being of help. The theory that we can help the poor merely by raising the prices of the products they sell or by lowering the prices of the inputs they buy will be practically defunct. Canadian policy will have oscillated from "help them to move out" to "help jobs to move in" (our present phase), and back and forth until by 1980 we have a sensible amalgam of the two.

TABLE 7
Acres, Production, and Availability of Grains, Canadian Non-Prairies, 1980

	1	2	3	4
	Acres	Production	Waste & seed	Net Available
	(thous.)	(thous. bu.)	(thous. bu.)	(thous. bu.)
Oats.....	1,615	78,350	4,350	74,000
Barley.....	695	33,365	1,365	32,000
Mixed grain.....	780	43,910	1,910	42,000
Corn.....	1,500	149,000	2,000	147,000
Winter wheat.....	350	15,750	750	15,000
Wheat.....	170	4,250	250	4,000
Rye.....	50	1,300	50	1,250

Derivation:

- Col 1 from Table 5, Col 4.
- Col 2 from Table 5 Col 6.
- Col 3 = Col 1 x appropriate seed per acre (rounded for assumed waste).
- Col 4 = Col 2 — Col 3.

TABLE 8
Cereal and Feed Grain Materials Balance, Canada, 1980

	Prairies										
	1	2	3	4	5	6	7	8	9	10	11
	Feed	require- ments	Human Consumpt.	Indtl. Use	Net exports	Total req'd. (col 2 to 5)	Avail- able non- prairies	Net Prod.	Gross	Minus Waste and Seed	Acres
	(thous. tons)			(thousand bushels)					(bu/ac)		(thous).
1 Oats.....	4,950	290,000	6,000	—	8,000	304,000	74,000	230,000	50	48	4,800
2 Barley.....	6,495	273,000	—	20,000	100,000	393,000	32,000	361,000	40	38	9,500
3 Mixed grain.....	1,700	85,000	—	—	—	85,000	42,000	43,000	45	43	1,000
4 Corn.....	4,000	144,000	3,000	25,000	—10,000	162,000	147,000	15,000	61	60	250
5 Rye.....	195	7,000	500	3,000	7,000	17,500	1,250	16,250	25	23	700
6 Ont. Winter Wheat.....	120	4,000	7,000	—	4,000	15,000	15,000	—	—	—	—
7 Marquis Wheat.....	—	—	70,000	—	200,000	270,000	—	270,000	25	23	11,750
8 Other Wheat.....	2,040	68,000	—	—	160,000	228,000	4,000	224,000	30	28	8,000
9 Total.....	19,500	—	—	—	—	—	—	—	—	—	36,000

Derivation:

- Col. 1. Must total 19,500 in order to meet requirements of Table 6, Col. 3.
- Col. 2. Col. 1 converted to bushels (Oats, 58.8 bu/ton; barley, 42; mixed 50; rye and corn, 35.7; wheat 33.3 bu/ton).
- Col 3 and 4. Largely from DSP, Page 39.
- Col 5. Estimated. Corn imports are falling. For cereals see Chapter on Wheat, Feed grains and Oilseeds.
- Col 6. Total of Cols 2, 3, 4, 5.
- Col 7. from Table 7, Col 4.
- Col 8. Cols 6 minus 7.
- Cols 9 and 10. estimated.
- Col 11. Col 8 ÷ Col 10.

TABLE 9
Land Use for Wheat, Feed Grain, Western Oilseeds and Fodder, Canada,
1966 and Projected 1980

	1	2	3	4	5	6
	Prairie Prov.		Non-Prairie Prov.		Canada	
	1966	1980	1966	1980	1966	1980
	(thousands of acres)					
1 Spring Wheat.....	29,780	19,750	148	170	29,928	19,920
2 Winter wheat.....	—	—	370	350	370	350
3 Oats.....	6,200	4,800	2,876	1,615	9,076	6,415
4 Barley.....	6,870	9,500	343	695	7,213	10,195
5 Rye.....	583	700	52	50	635	750
6 Mixed grains.....	670	1,000	913	780	1,583	1,780
7 Corn.....	19	250	752	1,500	771	1,750
8 Flaxseed.....	2,029	1,500	41	—	2,070	1,500
9 Rapeseed.....	1,388	5,500	—	—	1,388	5,500
10 Tame hay.....	5,185	8,521	7,279	7,279	12,564	15,800
11 Tame pasture.....	4,991	7,179	5,951	5,951	10,942	13,130
12 Fodder corn.....	48	80	542	630	590	710
13 Total Cols 1 to 12.....	57,763	58,780	19,267	19,020	77,030	77,800
14 Increase, 1966-80.....	—	1,017	—	-247	—	770
15 Summerfallow....	25,224	—	408	—	25,632	—

Derivation:

- Cols 1, 3 and 5 from *Selected Statistical Information on Agriculture in Canada*, CDA 1967 (Drawn from Census of Agriculture 1966.)
- Col 2 from Table 8 Col 11 for Rows 1 to 7. Rows 8, 9 and 12 estimated. Rows 10 and 11 based on requirements of Table 4 and the assumption that *all* extra acres in tame hay and tame pasture must be found on the prairies.
- Col 4 from Table 7 Col 1 for Rows 1 to 7. Estimates for other rows based on the same assumptions as for Col 2 of this table.
- Col 6 = Col. 2 plus 4.
- All other crops including potatoes, tobacco, fruits and vegetables etc, are not included in this table.

B. THE CHANGING STRUCTURE OF FARMING

One of the 1969 Outlook papers⁴ of the Canada Department of Agriculture predicted that there would be about 315,000 farms in Canada by 1980 compared with 430,000 in the 1966 Census. The 1980 projection was based on sub-estimates of

189,000 farms with sales over \$10,000 each,
47,000 farms with sales of \$5,000-\$10,000,
16,000 farms with sales of \$2,500-\$5,000,
63,000 farms with sales of less than \$2,500.

The C.D.A. forecast was based on assumptions that there would be no major changes in economic forces or policy during the period 1966-1980.

Table 10 indicates the numbers of farms in recent Census Years and the above C.D.A. projection for 1980. The most notable feature about the table

⁴ Canadian Agricultural Outlook Conference 1969, November 24, 25 Pages 218-228.

TABLE 10

Number of Farms by Economic Class, Canada, 1951 to 1966 and Projections for 1980

Annual Sales Per Farm	1951			1961			1966			1980 ^s		
	Number	Per Cent of all Farms	Per Cent of all Sales	Number	Per Cent of all Farms	Per Cent of all Sales	Number	Per Cent of all Farms	Per Cent of all Sales	Number	Per Cent of all Farms	Per Cent of all Sales
Commercial Farms ¹	235,090	38	78	259,037	54	90	276,835	64	95	252,248	80	
\$10,000 and over.....	21,243	4	22	48,841	10	45	95,032	22	65	189,186	60	
\$ 5,000 to \$9,999.....	69,019	11	27	90,419	19	27	96,856	22	21	47,296	15	
\$ 2,500 to \$4,999.....	144,828	23	29	118,777	25	18	84,947	20	9	15,765	5	
Small-Scale Farms ²	387,309	62	22	221,052	46	10	152,910	36	5	63,062	20	
All Farms ³	623,091	100	100	480,903	100	100	430,522	100	100	315,310	100	
Part-Time Farms ⁴	65,135	10.4	—	37,645	7.8	1.0	129,565	30	18	—	—	

¹Farms with annual sales of \$2,500 and over.²Farms with annual sales of less than \$2,500.³Includes institutional farms.⁴In 1951 and 1961, part-time farmers were defined as those with sales of agricultural products between \$250 and \$1,199 and

(i) where the operator reported 100 or more days of off-farm work or

(ii) where the operator reported farm income was less than his income from all other sources.

In 1966, the definition was changed to those who received \$750 or more from off-farm work during the previous year or those who received less than \$750 from off-farm work but worked 75 days or more off the farm.

⁵Projections for 1980: Number of all farms based on annual rate of change of 2.6 per cent during 1951-66. The number in each class is based on the assumed arbitrary proportions of farming in each class to total.

SOURCE: *Canadian Agricultural Outlook Conference 1969*. C.D.A. November 1969, p. 229.

TABLE 11
Canadian Farm Cash Receipts, 1967 and Projected 1980

Commodity	Units of Pro- duction	1	2	3	4	5
		1967 Pro- duction	1980 Pro- duction	Col 2 as % of Col 1	1967 Cash Farm Receipts	1980 Cash Farm Receipts
				(per cent)	(\$ million)	
1 Wheat.....	m/bu	593	538	91	765	696
2 Wheat C.W.B.....	—	—	—	—	270	245
3 Oats.....	m/bu	304	316	104	26	27
4 Oats C.W.B.....	—	—	—	—	12	13
5 Barley.....	m/bu	249	415	166	100	166
6 Barley C.W.B.....	—	—	—	—	29	48
7 Rye.....	m/bu	12	18	150	8	12
8 Flaxseed.....	m/bu	9	13	144	46	66
9 Rapeseed.....	m/bu	25	120	480	44	211
10 Soybeans.....	m/bu	8	7	87	21	18
11 Corn.....	m/bu	74	152	205	30	61
12 Other crops.....	—	—	—	—	499	580
13 Total crops.....	—	—	—	—	1,850	2,143
14 Cattle calves.....	000 head	3,149	4,795	154	930	1,432
15 Feeder exports.....	000 head	282	500			
16 Hogs.....	000 head	8,134	11,380	140	408	571
17 Dairy prod.....	b/lbs.	18.2	15.0	82.4	625	515
18 Poultry.....	m/lbs.	729	1,276	175	224	392
19 Eggs.....	m/lbs.	623	748	120	148	178
20 Other livestock.....	—	—	—	—	59	78
21 Total livestock.....	—	—	—	—	2,394	3,166
22 Forest and maple.....	—	—	—	—	22	22
23 Other (Subsidies).....	—	—	—	—	120	—
24 Total Cash Receipts..	—	—	—	—	4,386	5,328

Note Assumption of Constant Prices 1967 and 1980.

Derivation:

Col 1 Rows 1 to 11 from *Canadian Agricultural Outlook Conference, 1969* (hereafter "Outlook"). These are quoted as "1967-8" for crops.

Rows 14, 16, 18, 19 from *Demand-Supply Projections for Canadian Agriculture 1980* (hereafter DSP) also reported in Table 2 of this Chapter. Note these data are for 1964-6 average.

Row 15 from Catalogue 32-220 D.B.S. Calendar year 1967.

Row 17 from Outlook p. 111. Calendar year 1967.

Col 2 Rows 1, 3, 5, 7, from Table 8 Col 6 + Seed and Waste (Acres x Cols 10-9)

Rows 8, 9, based on acreage in Table 9, Col 6 of this Chapter.

Row 10 based on acreage in Table 5, Ontario Soybeans.

Rows 14, 16, 18, 19 from Table 1 of this Chapter.

Row 17—see Footnote to Table 2 of this Chapter.

Col 3 shows Col 2 as percentage of Col 1.

Col 4 from "Outlook 1969", pages 196-7.

Col 5 = Col 3 x Col 4—For Row 12, Col 5 represents 116% of Col 4; this is drawn from sums of Rows 1 to 11 for Cols 5 and 4.

For Row 20, Col 5 represents 132% of Col 4; this is identical with Rows 14 to 19 for Cols 5 and 4.

is not so much the decline in total numbers as the "scissors effect" of increasing numbers of large farms and declining numbers of small farms both from 1951 to 1966 and in the C.D.A. projections from 1966 to 1980.

The Task Force is of the opinion that the projections of the C.D.A. in regard both to numbers and "scissors effect" are conservative. If the recommendations of the Task Force are implemented, changes would be more rapid than projected by C.D.A. and it is likely that by 1980 there will be fewer than 315,000 farms in Canada. Corresponding to this accelerated rate of change will be an even larger proportion of farms in the largest size category.

Table 11 contains tentative calculations as to likely Farm Cash Receipts in 1980⁵. These are based on the levels of output projected for 1980 in the nine Materials Balance Tables of this chapter. Making the assumption that all farm prices will be identical in 1967 and 1980 and that the \$120 million of special subsidies of 1967 (Table 11, Row 23) will not be necessary in 1980, Farm Cash Receipts would have increased by about \$850 million (from \$4.39 billion to \$5.33 billion or 22 per cent). Alternatively, since these calculations are based on the assumption that prices would remain constant, the increase from 1967 to 1980 is a reasonable proxy for the expected increase in volume of production. In this case we exclude the \$120 million of special subsidy in 1967 and conclude that the increase in volume of production would be about 25 per cent. Economists and others will recognize the many arbitrary and questionable assumptions surrounding Table 11 and the tentative conclusions contained in this paragraph. Nevertheless, they indicate some of the changes in magnitude which appear to be reasonable to expect.

In its Outlook 1969, C.D.A. economists state "These projections are extensions of existing trends assuming no major changes in markets, in the rate of adoption of new techniques or in government policy. If these trends continue as anticipated, then Canada will have 75 per cent as many farms as it had in 1966. This will still be twice the number of farms that can earn competitive returns, as full-time farms, based on the gross value of sales of agricultural products."⁶ This Task Force is of the opinion that we will have moved a bit faster than the C.D.A. projections indicate.

In summary, by 1980 agriculture—both farming and agribusiness—will be a much more trim, stable, efficient and self-reliant industry than it is at present. Agriculture will never be devoid of problems and soft spots, but the drawbacks will be less serious and less extensive than in 1970.

⁵ The C.D.A. calculations assume implicitly that cash receipts to Canadian farmers would remain unchanged between 1966 and 1980. "It may then be estimated that the total number of farms which can be accommodated at this level of income (\$28,000 cash receipts) ... is about 154,000", Outlook Conference, page 219. Thus 154,000 farms with \$28,000 cash receipts gives total receipts of \$4.3 billion in 1980.

⁶ *Canadian Agricultural Outlook Conference 1969*, November 24, 25, page 222.

part three

INSTITUTIONAL STRUCTURE OF AGRICULTURE

chapter eleven

GOVERNMENT, AGRIBUSINESS¹, AND FARMER ORGANIZATIONS

In this chapter we confront one of the most difficult and contentious problems addressed by the Task Force—the formulation and implementation of agricultural policy. In the chapter on Goals we have discussed some general objectives—many of them somewhat abstract—and in the several chapters on commodities we have considered in detail what policies or programs the Task Force thinks ought to be undertaken in regard to wheat, milk and so forth. Policy making however is not a once-and-for-all matter but one that must be continuous intelligent formulation and implementation of policy involving understanding the system, sensing change in it, anticipating and recognizing problems and opportunities, analyzing and planning concerning them, implementing plans and evaluating results and then (usually) amending plans and programs. New problems and opportunities arise and create a new environment in the light of which old programs must be re-assessed.

To the Task Force it appears that improvements in *How* policy is formulated and implemented (the rationale and the machinery) are if anything more important in the long run than improvements in *What* policies are adopted. So far as the Task Force is concerned the long term contributions it makes will arise from the advice it gives concerning the process of making policies and the organizational structure for implementing them. The wheat

¹ Throughout this report we have used the term “agribusiness” to refer to those firms which provide farm supplies and certain direct services to farmers as well as those firms which market farm-produced commodities. This use of the term “agribusiness” is the common one in Canada but it differs from the original definition formulated by Professor John Davis of Harvard who included commercial farm firms as well as farm supply and marketing firms.

crisis will pass away and new and unforeseen crises will take its place; the continuing questions relate to the process and machinery for coping with them; if the process and machinery are satisfactory, the decisions themselves are likely to be satisfactory.

Policy making is only part of a satisfactory whole. Few exercises are as pointless as recommending objectives, policies and programs without agreement as to who has responsibility and authority to implement. Thus not only must satisfactory decisions be made but there must be clear-cut responsibility and authority for implementation and review.

A. THE AGRICULTURAL SYSTEM

In this section we turn to a brief discussion of agriculture as an organized system. The circular flow diagram of Figure 1 illustrates the interdependence of the various component groups in the agricultural system whereby each component is directly dependent upon the group behind it for inputs and upon the group ahead of it for markets. Farms, marketing firms, consumers and industry (including farm supply firms) are each an essential part of the circular flow. As Figure 1 indicates, governments have an important role in affecting the relationships between any two groups as well as the actions and performance of any group.

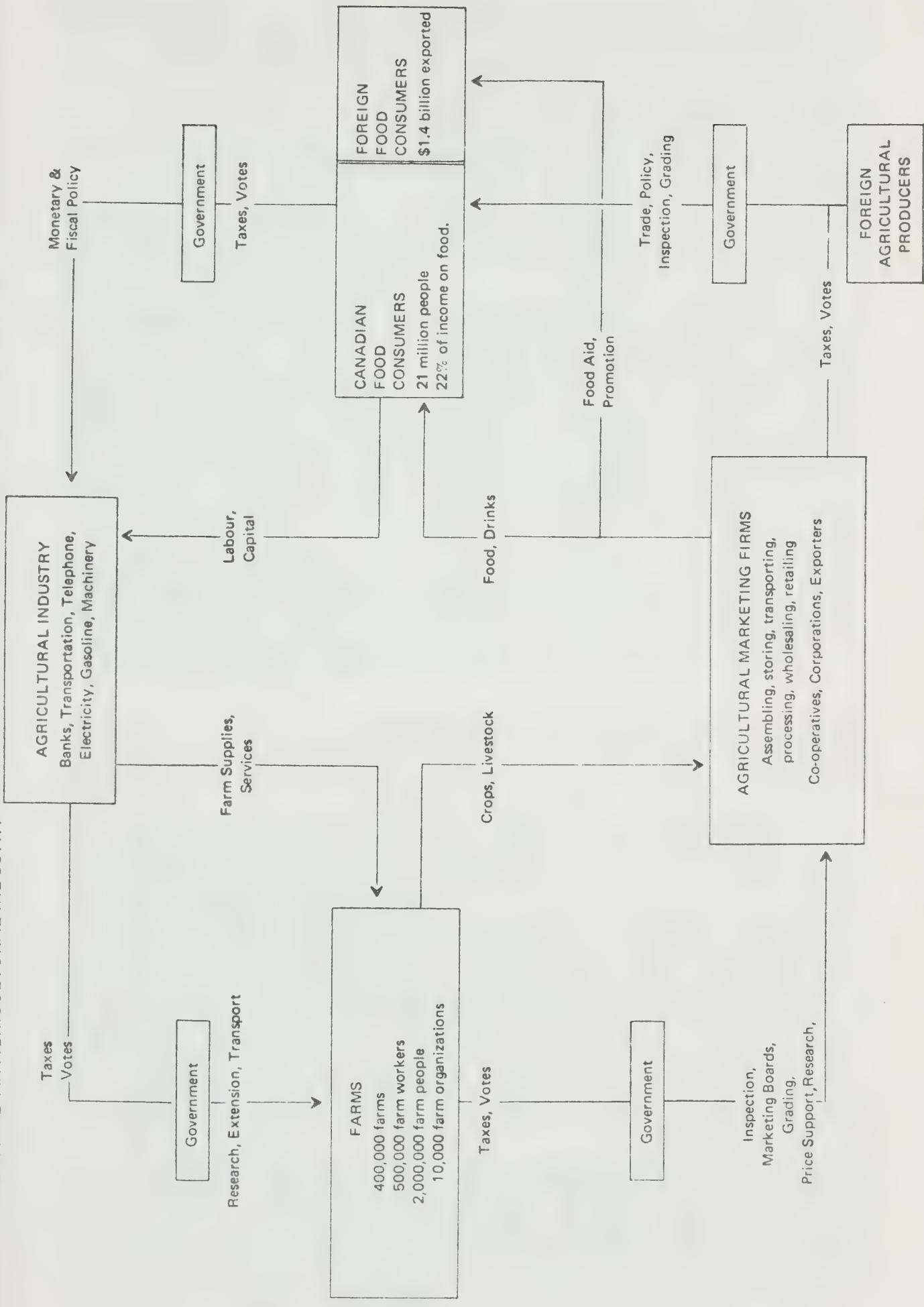
In the industry are 400,000 farms, 500,000 farm workers and close to 2,000,000 farm people. Farmers sell about \$4.4 billion of farm commodities per year. Providing supplies and services to farmers are thousands of firms: in 1968 farmers bought about \$425 million of farm machinery², \$212 million of fertilizers, \$54 million of pesticides, \$568 million of feed (through commercial channels), and spent \$245 million on new construction. They spent other millions on electricity, telephones, gasoline, banking services and so forth. Total farm operating expenses were estimated at \$2,681 million in that year, excluding depreciation on buildings and machinery. All these purchases represent a substantial amount of demand for Canadian labour and investment in the non-farm sectors of the economy. These purchases represent essential demand for the farm supply firms. Buying and selling however, is not a one-way street in which one party is doing the other a favour. Farmers presumably needed or at least found it advantageous to buy, \$425 million of farm machinery etc. Without it, and the fertilizers, pesticides and so forth, farm production costs would have been higher.

In 1968 farmers paid about \$185 million in taxes on land and buildings to municipal governments.

Marketing firms involved in assembling, transporting, storing, processing, wholesaling and retailing farm products constitute another major sector of agricultural industry. Table 1 gives an indication of the magnitude of this sector of agriculture; firms processing farm products only into basic foods and feed had sales of \$4.8 billion in 1966 and paid \$665 million in salaries

² This is the figure for sales by manufacturers to dealers and not necessarily equal to sales to farmers. Data from C.D.A. Outlook 1969. Page 209-211.

FIGURE 1 THE CANADIAN AGRICULTURAL INDUSTRY



and wages to 146,000 employees. This does not include the wineries, breweries, distilleries, tobacco manufacturers and a number of other firms which also use farm products nor the retailers and traders in processed products.

About 21 million Canadian consumers spent \$8.5 billion on food and another \$2.5 billion on tobacco and alcoholic beverages in 1968.

Along with farms, farm marketing firms, and farm supply firms there is another major participant in agriculture—government. A quote from a research paper written for the Task Force in 1968 is relevant here:

The Canada Department of Agriculture now employs more than 12,000 people full-time, of whom more than 2,000 are professional scientists. The Department operates more than 200 separate establishments, including 27 experimental farms, 13 research stations and 8 research institutes. In addition, the Rural Development Branch in the Department of Forestry and Rural Development spends \$6 million on central ARDA research and about \$33 million on participating projects with provinces.

It administers as well the Fund for Rural Economic Development (FRED) which amounts to several hundreds of millions. Other important federal agencies that are part of the agricultural community include the Canadian Wheat Board, the Farm Credit Corporation, the Canadian Dairy Commission, the Canadian Livestock Feed Board, the Board of Grain Commissioners, and the Veterans' Land Act Administration, to list only the most important . . .

The agricultural community includes as well ten provincial departments of agriculture with a combined budget in excess of \$200 million annually and employing an estimated 30,000 persons. Six provinces maintain university establishments in agriculture, while all provinces have secondary and post-secondary vocational agricultural colleges, schools or institutes.³

B. GOVERNMENT

The Role of Government in the Organizational Structure of Agriculture

One of the most basic questions in Canadian agriculture relates to the extent, nature and effectiveness of government involvement. It is obvious that action—perhaps drastic and far-reaching—must be taken by many individuals and organizations to help define the problems of agriculture and formulate and implement the policies and programs necessary to bring about improvement. Few exercises are as pointless as recommending objectives, policies and programs without agreement as to who has responsibility and authority to implement. The Federal and provincial governments have become deeply involved—many argue primarily responsible—for the overall well-being of agriculture. Government power over agriculture includes the right to decide and/or influence objectives and policy, legislate and implement programs and through the distribution of tax revenue, allocate funds to agriculture and from one province to another.

Such extensive political power is offset by checks and balances that tend not only to guard against its abuse but also sometimes to obstruct its purposes. Nevertheless, no organization exercising this kind of power can absolve itself of responsibility for results.

³ Paper prepared by Professor H. Whalen of Memorial University.

TABLE 1
Statistics Relating to Certain Manufacturing Industries, Canada, 1966

	Value of Shipments	Total Value Added	Total Employees	Total Salaries and Wages
	\$'000	\$'000		\$'000
Slaughtering and Meat Processors.....	1,632,830	305,249	30,289	163,539
Poultry Processors.....	227,776	41,301	6,699	22,238
Dairy Factories.....	1,070,972	286,790	31,845	147,202
Process Cheese Manufacturers.....	85,467	36,996	1,710	11,181
Fruit and Vegetable Canners and Preservers.....	470,298	200,311	20,558	81,739
Feed Manufacturers.....	468,850	113,844	8,869	40,310
Flour Mills.....	263,689	59,339	4,350	22,300
Breakfast Cereal Manufacturers.....	48,503	30,954	1,361	7,550
Biscuit Manufacturers.....	109,051	58,055	6,636	27,857
Bakeries.....	463,442	247,541	34,092	141,419
Sub-Total Foods.....	4,840,878	1,380,380	146,409	665,335
Distilleries.....	263,188	186,275	5,398	33,957
Breweries.....	321,314	232,880	9,391	64,495
Wineries.....	25,059	14,029	755	4,425
Sub-Total Beverages.....	609,561	433,184	15,544	102,877
Leaf Tobacco Processing.....	128,225	19,779	1,494	5,379
Tobacco Products Manufacturers.....	301,591	151,243	8,683	47,750
Sub-Total Tobacco Products.....	429,816	171,022	10,177	53,129

SOURCE: Patterson R.A. "A Survey of Selected Segments of Canadian Agribusiness" Material compiled from DBS data.

In view of the deep seated problems and sombre prospects of Canadian agriculture, we must attempt to resolve several basic issues in regard to the roles of the Federal and provincial governments. Some of these are as follows:

What ideally should be the roles of government in agriculture?

What is the nature and extent of the involvement of Federal and Provincial governments in agriculture?

What criteria should be used to evaluate the performance of governments in agriculture?

How well have governments performed their roles in agriculture?

Who ultimately is responsible for diagnosing the problems of agriculture and taking the action to solve them?

What kind of overall structure and relationship for the key groups in agriculture would be best?

How should governments, farmers, farm organizations and agribusiness fit into this ideal organization?

Until these issues have been researched, communicated and debated, at least to the point of a workable consensus, Canadian agriculture will probably continue in its present state. No one will be able effectively to assign responsibility for the problems relating to unsatisfactory income performance on any individual and/or organization, nor will any one have a mandate to bring about needed improvement.

Current Issues

Study of research reports, press comments and statements by farmers and farm leaders make it clear that there are many issues being raised in regard to government participation in agriculture. We present a number of quotations to highlight four main issues and to show the diversity of opinion on these.

1. Extent and Nature of Government Involvement

In regard to government involvement, farmers seem divided: Some western cattle and grain farmers are vocal supporters of less government involvement. As one western cattleman put it:

There is nothing much wrong with agriculture that wouldn't be improved if the government moved out.

The opposing point of view was stated by a turkey grower:

Let's face it, the only way out of this mess is for the government to take complete control. They have to say what to produce, how much to plant, when and how it will be sold and what the price will be. Otherwise you have farmers fighting each other.

Effectiveness of government involvement

Consideration of the issue of the effectiveness of government involvement leads to questioning whether the government is doing the right things. For example, one well known authority on agriculture has written about poverty as follows:

The rural poverty problem has been around a long time and it remains a hard-core, unsolved problem in the 1960's . . . There have been policies and there have been programs for combating rural poverty. But it is a sad story of ineffective policies and programs; it is a record of *too little, too late*. (Cochrane, Willard W., *The City Man's Guide to the Farm Problem*, P. 194).

An allegation of lack of effectiveness in government policy related to research was:

For some years now, attention has been drawn to the lack of co-ordination between research in the field of physical and biological sciences and in the socio-economic field. Very often, research is not at all oriented toward the solution of problems of competition that face the country of a given region. It even seems that too many resources are used on certain projects which are not economically viable, either on a short-term, middle-term or long-term basis. (M. Daneau and Y. Dube, *Federal Provincial Relations in Agriculture in Canada*, Ch. V. A study for the Task Force.)

Efficiency of government involvement

Many farmers are sceptical that good dollar value is derived from government agricultural expenditures. One provincial official stated that there could be considerable waste and graft in his province's production subsidy program.

There have been few known and publicized in-depth reviews of existing programs and their results. Programs like PFAA, PFRA, MMRA etc. have been in existence for years; they may have good results or bad results or (more likely) both but the point is that adequate reviews of these good or bad results have never been made and publicized.

It is, of course, impossible to poll all the stakeholders in agriculture to find out what all the issues are and what the consensus is on each. Comments such as those above are, however, frequently repeated. In spite of the fact that it is impossible to judge whether they are truly representative or not they represent the attitudes and conclusions of many farmers, government officials and responsible observers of government agricultural policy. As such, they deserve consideration. If they are wrong the reasons why should be spelled out publicly; if they are not wrong the underlying problems should be diagnosed and corrected.

2. *Lack of Integrated Objectives*

For many years governments have been following a haphazard approach to agricultural problems. The general policy has been to attack individual problems as they appear. Many programs end up conflicting with each other. Worse yet, they often conflict with the ultimate objective of increasing farm incomes. (Report of the Special Committee on Farm Income in Ontario, p. 27).

The basic conflict in Canadian agricultural policy has been an *implicit* cheap food policy and an *explicit* small farm maintenance policy. The developmental policies of research, extension, subsidized credit, settlement expansion and resource development, actually contribute to and constitute the so-called 'implicit' cheap food policy.

The provisions of various acts favoring small farms, such as the Homestead provisions, Agricultural Stabilization Act provisions, P.F.A.A. provisions, credit ceilings and cash grants, are evidence of the existence of an explicit small farm maintenance policy.

Not only have the two policies been pursued simultaneously in Canada but are in direct conflict with each other. This is the heart of the basic conflict in agricultural policy, a cheap food policy together with a small farm maintenance policy. (Philip J. Thair, *Goals for Agricultural Policy*, a study undertaken for the Task Force).

As for the programs connected with the development of resources, irrigation and drainage programs, community programs relating to pastureland, conservation programs, these have double objectives: (1) to increase the efficiency and yield of the farming sector by an intelligent use of soil and water; (2) to protect, if not increase, the national heritage in these areas. None will doubt the validity of these objectives. But there can be no doubt that they may conflict with the objectives of other agricultural programs. For example, certain farm programs aim at increasing both prices and the earnings of farmers. How are these objectives consistent with those aimed at increasing production, at developing resources? (M. Daneau and Y. Dube, *Federal Provincial and Interprovincial Relations in Agriculture in Canada*, Ch. 8.) op. cit.

3. *Expediency in Decision Making*

Canadian farm policy since 1930 . . . has been largely one of providing expedient measures to meet crises of depression, drought, war inflation and surpluses . . . There is little evidence that Canada has had any overall national policy based on clear thinking and economic and sociological research facts. (Lorne Hurd, *Policy Research is Agriculture's Greatest Need*, *Agricultural Institute Review*, Jan.-Feb. 1960).

4. *The Issue of Independence*

Some people have argued that government involvement in agriculture has become so pervasive that it has reduced, perhaps considerably, the will and ability of the farmer to stand on his own. Government responses to farm problems have, for better or worse, resulted in a system where many farmers hold the government responsible for solving their problems. A major difficulty arises, of course, when individuals or organizations in the government, justifiably or not, have a very different view of their role and do not accept such a responsibility.

As a result of the political reality that Canadian voters are divided 92% non-farmer and 8% farmer and as the government increases its influence in agriculture it must give primary attention to the views of the urban population⁴. This political reality applies, of course, to all minority groups.

It is also perhaps worthwhile to speculate about the effect of government involvement on farm organizations. It is noticeable that farm organizations often place their fate in the hands of the government to a much greater extent than business and unions, the other major countervailing powers in our society.

Government Involvement in Agriculture

While it is practically impossible to describe accurately the total government involvement in agriculture ranging over the Federal, provincial and local levels and from formal, direct, open and legal control to informal, indirect and subtle influences, a short summary of the more obvious aspects has been stated by Garland and Hudson⁵:

The traditional structure of agriculture, consisting of a large number of independent, small-scale, family-operated farm units, plagued by variable yields and variable prices and under pressure to make continual adjustments to keep pace with technological and economic development, has invited a much greater degree of governmental involvement than is the case with other industries.

Land settlement programs providing for grants and sales of land to prospective settlers during the first 60 years following Confederation were the first form of government involvement in agriculture in Canada. During those early years of settlement government assistance to increase the production of crops and livestock was provided through grants to agricultural societies whose aim was to improve production and marketing efficiency.⁶ The Health of Animals Act of 1879 involved the federal government in the control and prevention of livestock diseases. The establishment of the federal experimental farms system in 1886 was the beginning of the experimental and scientific research work which has played such a large part in the development of the agriculture industry in Canada. It was during the

⁴ The 92:8 ratio gives an erroneous impression. Rural-urban representation in the House of Commons is of the order of one-third *versus* two-thirds. In a free vote on an issue involving a clear conflict between farm and urban interests almost all of the members from the Prairie provinces and large numbers from other provinces would vote rural. (David L. MacFarlane).

⁵ Garland, S. W. and Hudson, S. C., *Government Involvement in Agriculture*, a study for the Task Force, pp. 314-318.

⁶ W. M. Drummond, et al, *A Review of Agricultural Policy in Canada*, The Agricultural Economics Research Council of Canada, June 1966.

last decade of the 19th century,⁷ when financial assistance was provided for the establishment and operation of dairy plants and equipment that the federal government introduced its first real program to improve the quality of farm products.

The expansion of agriculture on the Prairies in the early 1900's brought grain marketing problems, with resultant pressure from producers to improve marketing facilities and the subsequent involvement of both the federal and provincial governments in marketing. The Manitoba Government operated country elevators in 1909 and 1910, and in 1913 the federal government undertook the operation of terminal elevator facilities.

The 1920's saw an expansion of the research work begun with the establishment of the experimental farm system. Inspection and grading which had previously been largely confined to products for export were extended to many agricultural products sold for domestic use.

The depression of the 1930's with the accompanying drought in the Prairie Provinces gave rise to various forms of relief assistance and thus involved governments in income maintenance payments as well as in conservation and rehabilitation programs. The Canadian Wheat Board, the Prairie Farm Rehabilitation Administration and the Prairie Farm Assistance Administration which were established by the federal government during that period are still operative.

Price controls and programs to stimulate production as part of the overall war effort were introduced in the early 1940's by the federal government. Cash payments were made to farmers to supplement their incomes in lieu of price increases and to encourage shifts in production from one product to another and quality premiums were introduced to obtain the type of product required. Public funds were also used to subsidize the purchase of a wide range of agricultural production inputs including feed, seed, fertilizer, limestone and machinery.

During the early post-war years, price controls were relaxed and eventually eliminated. Subsidies were reduced and most were eventually discontinued. However, agricultural limestone subsidies, freight assistance on feed grain shipped to eastern Canada and British Columbia and hog quality premiums are war-time programs that became a permanent part of the post-war agricultural assistance program. Legislation passed in 1944 to provide for the support of prices of agricultural products during the transition from war to peace was given continuing status in 1950. The Farm Improvement Loans Act of 1944 provided a federal government guarantee for short and intermediate term loans to farmers. Financial assistance was provided for veterans of the armed forces for land settlement, under terms of the Veterans' Land Act. Provincial governments assisted by making new lands available for settlement, often with special provisions for financing clearing and breaking. The rapidly changing technology in agriculture brought increased requirements for capital to finance farm operations in the 1950's. To assist in meeting this demand the federal government and almost all provincial governments introduced new farm credit programs. During this decade the provincial governments intensified their extension activities with increased emphasis on conservation, quality improvement, eradication of disease, increased production and farm management.

The Agricultural Prices Support Act of the federal government was replaced by the Agricultural Stabilization Act in 1958, making price support mandatory for nine key commodities. The Crop Insurance Act, Farm Machinery

⁷ Ibid, p. 21.

Syndicates Credit Act, Agricultural and Rural Development Act and the Canadian Dairy Commission Act have been enacted by the federal government during the past decade as part of the effort to improve the economic welfare of the agriculture industry.

An indication of the extent and rate of growth of government involvement in agriculture can be obtained from a comparison of federal and provincial government expenditures on agriculture during the three years 1964-65 to 1966-67 with government expenditures on agriculture during the 1930's. Total government expenditures on agriculture amounted to \$442 million in 1966-67, \$387 million in 1965-66 and \$323 million in 1964-65 compared with \$22 million in 1933-34, \$62 million in 1937-38 and \$66 million in 1943-44.

The factors responsible for the phenomenal growth may be determined by dividing expenditures into *three broad groups based on the nature of the individual program*. These groups are (1) those intended to facilitate the production and marketing of farm products; (2) those concerned with producer price and income maintenance; and (3) programs of research, education and extension. Production and marketing programs accounted for 60 per cent of government assistance in 1933-34 as compared with 35 per cent in 1966-67. At the same time expenditures for price and income maintenance increased from 16 per cent in 1933-34 to 41 per cent in 1966-67. Large relief expenditures in rural areas of western Canada during the 1930's and wartime expenditures in connection with agricultural production caused the percentage distribution for 1937-38 and 1943-44 to depart somewhat from the overall trend. Expenditures on education, research and extension accounted for 19 per cent of expenditures in 1933-34, essentially the same proportion as in the years 1964-65 to 1966-67.

Table 2 helps to put government expenditures on agriculture in perspective. The total of \$442 million in 1965-66 does not include expenditures for the benefit of agriculture in a variety of other federal or provincial departments such as Industry Trade and Commerce, Post Office, Forestry, Energy Mines and Resources and the like.

This total represents an expenditure of about \$20 per capita for the total Canadian population. To see this figure in perspective it can be compared to per capita expenditures of roughly \$8 on the C.B.C. and \$90 on National Defence.

Another way of viewing this situation is to see government as a collector and allocator of revenues and resources. Although it is not necessary for us to evaluate the rationale of the collection method—this was presumably covered by the Carter Commission—we should assess the effectiveness and efficiency of the government as an allocator of resources (a) from the rest of the economy to agriculture and (b) among competing projects in agriculture. Some of the other chapters in this Report indicate that a considerable number of programs are of dubious value. Many programs are apparently being carried on without the tough minded, systematic procedures desirable for evaluation of total costs, benefits and return on investment. There does not seem to be enough pressure to cancel programs that have either served their purpose or proven unsatisfactory. Lacking tight criteria and practical routines for evaluation, programs tend to be carried on from year to year.

Perhaps the most difficult aspect of government involvement in agriculture is that it has become so extensive and complex that it is impossible to

TABLE 2
Distribution of Government Expenditures on Agriculture by Major Category, Selected Years, 1933-34 to 1966-67

Year	Production and Marketing		Price and Income Support		Education, Research Extension		Administration		Wartime	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent Total Amount
	(thousand dollars)		(thousand dollars)		(thousand dollars)		(thousand dollars)		(thousand dollars)	(thousand dollars)
1933-34.....	13,040	60.3	3,414	15.8	4,140	19.1	1,039	4.8		21,633
1937-38.....	20,631	33.3	33,814	54.5	6,482	10.4	1,115	1.8		62,042
1943-44 ¹	24,788	15.9	34,358	22.0	5,630	3.6	1,487	1.0	89,813	57.5
1943-44 ²	24,788	37.4	34,358	51.9	5,630	8.5	1,487	2.2		156,076
1964-65.....	130,713	40.4	116,069	35.9	67,831	21.0	8,720	2.7		66,263
1965-66.....	136,613	35.3	162,178	41.8	76,237	19.7	12,314	3.2		323,362
1966-67.....	156,339	35.4	180,329	40.8	89,190	20.2	16,197	3.6		387,342
										442,054

¹Including wartime expenditure.

²Excluding wartime expenditure.

SOURCE: Expenditure data for 1933-34, 1937-38 and 1943-44 from *Agriculture*, Reference Book for Dominion-Provincial Conference on Reconstruction, 1945, Tables 1 and 5, pp. 82 and 84.

Reprinted from Garland, S. W. and Hudson, S. C. *Government Involvement in Agriculture*, a study for the Task Force.

describe and assess it. Due to the complexity and fragmentation of Federal Government departments and agencies concerned with agriculture, as well as the problems of federal-provincial co-ordination, no structure of authority and responsibility exists for integrating and co-ordinating government activities.

Recommendations as to how to change and integrate the organizations involved to bring the functions of government in agriculture under better control are presented in the last section of this chapter.

The Political Bargaining Arena of Canadian Agriculture

In order to understand the role of government, it is necessary to begin with an overview of the organizational system which constitutes "Canadian Agriculture".

Although there are literally hundreds of significant groups involved, Canadian agricultural policy is governed primarily by the interplay of the following interests and points of view:

- farmers and farm population divided into sub-groups relating to commodities, regions, income classes and political-economic biases.
- agribusiness divided into sub-groups relate primarily to commodities and functions.
- provincial governments standing both individually and combining in groups related to regions and common problems.
- consumers whose desires are made known through independent consumer associations and the Federal Government Department of Consumer and Corporate Affairs.
- Federal government departments and agencies who present and defend points of view related to various functions, departments, programs and policies.

In addition there are many jurisdictional questions associated with the federal-provincial division of responsibilities in agriculture.

The constitutional division of jurisdictions in agriculture sets up a joint assignment of authority with priority to Federal legislation. The pertinent legislation, section 95 of the B.N.A. Act, describes the relationship as follows:

In each Province the Legislature may make laws in relations to Agriculture in the Province . . . and it is hereby declared that the Parliament of Canada may . . . make laws in relation to agriculture in all or any of the Provinces . . . and any law of the Legislature of a Province relative to Agriculture . . . shall have effect in and for the Province as long and as far only as it is not repugnant to any Act of the Parliament of Canada.

Despite the apparent clarity of this text, many legal issues have arisen, especially in regard to the scope and nature of activities that constitute "agriculture", and what constitutes legislation that is "repugnant" to a Federal Act. As agricultural affairs have worked out in practice a complex mix of joint Provincial-Federal responsibilities has evolved. It is important to note that all eleven governments co-operate with cordiality and a real degree of success in attempting to work out mutually acceptable policies and solutions.

Philosophy—the Role of Government

There never has been and there never will be full agreement about the proper role of government in relation to an economy or a sector of an economy. Obviously a great deal depends upon the political philosophy of the people, the social structure, the distribution of wealth, the capacity and honesty of the civil service and even seemingly non-political events like droughts and inventions. In a country like Canada, governments provide certain services exclusively (post office), control partly public, partly private enterprises (airline franchises), support some prices (butter) leave other enterprises almost completely free (beef) and operate monetary, fiscal and commercial policies. In a pluralistic⁸ society, it is natural that the role of government will be conceived quite differently by different groups and in regard to different sectors. Yet some generalization is necessary if the question of the role of government is to be seen in perspective and general guidelines developed for action.

Table 3 presents a rough spectrum of government involvement in agriculture, varying from the minimum in Stage One to the maximum in Stage Five. Table 4 spells out some of the major characteristics of these five stages especially as they relate to farmers. Obviously these two tables are entirely arbitrary in their numbers and description of stages but they help to put the extent of government involvement into perspective.

It is instructive to attempt to place different countries in the various stages of Table 3 and to attempt to determine whether they are moving in the direction of more planning or less. However, any attempt to make such a generalization runs into problems because of the complexities involved and a lack of the hard research data necessary to make judgments that are more than rough approximations. Countries such as Mainland China and the U.S.S.R. are in Stage Five, with almost total government planning and control. In a mixed economy in which ownership and control are divided between the government and private owners it is difficult to generalize with confidence because the type and extent of government involvement varies so much among different sectors of the economy.

The most important controversy in regard to government involvement—the basic issue between the approaches of communist and western countries—relates primarily to the ideal model to be sought in the organization of a political-economic-social system. The western assumption is that a democratic political system ensuring the highest practical degree of individual freedom is of primary importance and that government economic planning must be conditioned by this supreme principle. The guiding principle in communist countries, opposing this western concept, holds that rationalization of the socio-economic system is of primary importance and that the form of government should be the one that is best suited to implement the ideal (socialized) economic system. Although there are many other basic economic, social, cultural and technological differences between communist and

⁸ A pluralistic society is one in which there are many groups and organizations serving many different purposes. A typical Canadian belongs to many bodies—political, social, religious, financial—all competing for his support and sometimes in conflict with one another.

TABLE 3
Five Stages of Government Involvement in Farming
Degree of Government Planning and Control

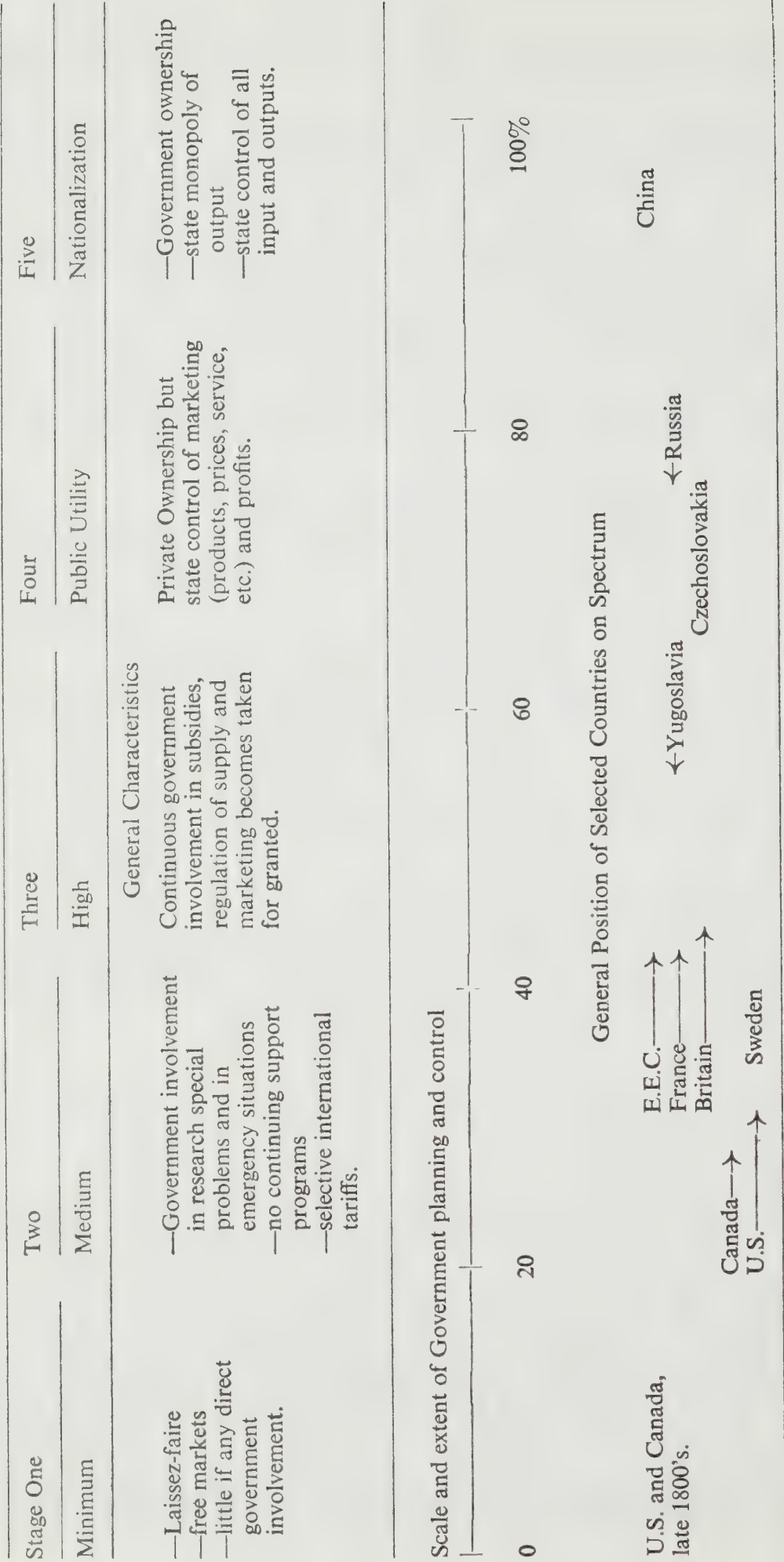


TABLE 4
Major Characteristics of Farming Systems in the Five Stages of Government Involvement

Stage	One	Two	Three	Four	Five
Major Characteristic	laissez-faire free enterprise	medium government involvement	heavy government involvement	public utility	complete government control
Role of Farmer	on his own with almost complete freedom and risk	on his own but looks to government for limited help	runs farm in context of government planning and welfare	owns farm but works for government with output, marketing wages and return on investments regulated	farmer and employee of government
Role of Government	no involvement except for basics such as favourable environment, statistics, import regulations and the like	government gets involved in research, special problems, welfare on a discontinuous basis	government becomes responsible for supply-demand, welfare, continuous government involvement taken for granted	control of production, prices, quality	complete ownership and control
Supply Management	none	suasion but no control	government control	government control and plan	government control and plan
Input Control	none directly	suasion but no control	government plans resource inputs but no control unless necessary	human inputs controlled in number and education; non human inputs planned	all resource inputs (including labour) government planned and controlled
Marketing	farmers compete on open market, no marketing boards	marketing boards optional	national marketing boards for all commodities	government control of prices	total government control of allocations, prices, etc.
Structure	result of free enterprise	government suasion but no control	some regulations regarding size and integration	comprehensive planning and control of structure	total government plan
Farm Prices	determined on open market	some supports in case of emergencies	complex structure of government supports nearly in all commodities	government regulation of all farm prices	government regulation of all farm prices
Income	farmer on his own in free market	government assists in income problems	government supports income at definite level	government regulates income	government pays wages

western countries, this fundamental difference in ideological commitment is the most important and is reflected in the extent and nature of economic planning and control by government.

The Task Force opts for a position between Stage Two and Stage Three—but closer to Stage Two than Three.

Stage One—the free enterprise option—has great attraction for those who desire maximum individual freedom and have little confidence in the effectiveness and efficiency of bureaucracy, government or otherwise. It is also attractive to those who retain a simplistic Adam Smith concept of economics. It obviously appeals to farmers who are doing well as they see it, stand only to lose, in one way or another, if government planning and control are increased.

The problems of this approach are also obvious. It is not feasible. To reach this system farmers would have to go through the wringer in adjusting to a free market. This would almost certainly invite crisis and disaster. It is out of tune with the realities of government-business-union interactions circa 1970.

Stages Four and Five, at the other extreme, also stand out in black and white. Their major attraction is for those who favour a planned, socialistic, utopian, 1984 approach to solving the problems of society including agriculture. Whatever its merits in other sectors, it is clear that socialism has not worked well in agriculture. Complete planning and control assume a kind of human nature and motivation which have been generally rejected in North America. Moreover, it is clearly out of tune with the environmental systems in which Canadian agriculture exists.

An advantage of Stages Two and Three is that they so closely resemble the status quo in Canadian agriculture that they do not imply drastic change in the system. In spite of the many problems involved, they have been proven to work after a fashion. However, their main disadvantages are that they are not working satisfactorily and there are few responsible observers of Canadian agriculture who advocate continuance of the status quo.

Thus not only does the Task Force opt for a stance of medium government involvement (Stage Two plus a small amount of Three) but it also opts for vastly improved performance in these stages. Ways in which performance may be improved appear in most chapters of this Report and particularly in the last section of this chapter. In summary then, the general role of government should be to produce a favourable economic climate for farmers and agribusiness but not to attempt to “manage” or “direct” agriculture. Many basic decisions must still be made by hundreds of agribusiness firms and by thousands of individual farmers and their families but governments must do a better job of ensuring a higher degree of knowledge and possible co-ordination among agribusiness, farmers and government. We discuss this subject in the last section of this chapter.

Operational Functions of Governments

There appear to be four main operational functions for governments whether they are dealing with such tangible things as wheat marketing or such intangibles as education and welfare.

1. Forecasting problems and opportunities

The first question to be raised in evaluating a government organization is: How well do the staff size up the situation and forecast problems and opportunities in the near, medium and long-term future? All planning of policies and programs should be related to present realities and future problems and opportunities. If government organizations cannot forecast future problems and opportunities, their planning activities are bound to be late, wasteful and relatively ineffective.

2. Planning policies and programs

The second question is: How well do they plan policies and programs designed to solve future problems and take advantage of future opportunities? It is obvious that if one can forecast major problems and opportunities the next challenge is to plan for them. For government organizations this means formulating the policies and programs necessary to solve problems and perhaps more importantly, capitalizing on the opportunities that will develop. As a (successful) campaign poster put it in 1968:

We expect government organizations to offer clearly defined, practical solutions.

3. Implementation of policies and programs

The third major criterion for appraisal is: How well do they implement the policies and programs planned to solve future problems and take advantage of future opportunities? Without ability to put solutions into action through the appropriate legislative and administrative process and channels, government department is powerless to solve the grass roots problems that created the need for government involvement in the first place. Moreover, without effective implementation even a well planned, logical program will fail.

4. Program and budget review and evaluation

The fourth important measure of any government or department is its ability to appraise and improve its operation. This implies that budgets and results should be carefully measured in terms of performance indicators that can be related to stated purposes. Programs with unsatisfactory payoffs should be improved or cut. Programs that have served their purposes should be terminated.

The Task Force places particular emphasis on these four operational functions of government. It should be clear however, that they apply not just to government but to all decision making bodies. Farmers should judge their elected representatives and employees by these criteria; shareholders in agriculture should do the same.

Requirements for the Performance of the Four Functions of Government

Forecasting problems and opportunities involves among other things a research organization to anticipate problems rather than just to describe them once they have arisen. Obviously something was wrong in regard to wheat and coarse grains which are now problems of the imminent and overwhelming variety. Obviously too, something was wrong when the opportunities for

increased beef production were not identified several years ago; while much more is being done on the breeding and crushing of rapeseed, the economic and market aspects deserve much more study if potential opportunities are not to be missed. As we point out in our chapter on Research, there has been misplaced emphasis among research fields. In the chapter giving the Materials Balance Tables (Chapter 10) we have found ourselves breaking new ground in attempting to forecast the likely shape of agriculture in 1980. This kind of work, with additional man years of time, will help to identify problem and opportunity areas in advance rather than in retrospect.

Planning and implementation have sometimes been dissipated among various levels of government and departments of the same government. Take wheat for example: We now have three ministers of the Federal Government involved—Agriculture with its research staff, credit, Board of Grain Commissioners, etc.; Industry Trade and Commerce with its trade counsellors overseas and its substantial Grain Division; and now a Minister responsible for the Canadian Wheat Board. One province conducts small barter deals; several provinces support programs of land clearing and one million acres of improved land is added to prairie farmland each year.

No other commodity seems to have been quite so subject to a proliferation of conflicting jurisdictions and policies as wheat but milk probably runs it a close second. It is perhaps no accident that the two most serious problem commodities are these. Table 2 above indicates the size and categories of government direct expenditures on agriculture. Not included, of course, are expenditures on programs such as general education, welfare, transportation subsidies and so forth in which farm people may participate along with others. Table 5 shows that Federal Government expenditures have been about 70 percent of total government expenditures on agriculture, with the provinces supplying the remaining 30 per cent.

In many ways both Federal and provincial departments of agriculture deserve credit for their co-operative approach to problems for which both levels of government could have responsibility and authority. Provincial departments can be expected to have narrower and more limited objectives than the Canada Department of Agriculture, and without considerable co-operation and consultation, there could easily be open conflict of objectives

TABLE 5
Federal and Provincial Governments Net Expenditures in Agriculture

Year	Federal		Provincial		Total	
	\$	%	\$	%	\$	%
1960-61.....	269	78	77	22	364	100
1961-62.....	295	79	77	21	371	100
1962-63.....	240	77	72	23	212	100
1963-64.....	295	78	81	22	376	100
1964-65.....	237	71	100	29	337	100
1965-66.....	266	68	127	32	393	100

SOURCE: *Financial Statistics of Government of Canada*, D.B.S. No. 68-211 and *Financial Statistics of Provincial Governments*, D.B.S. No. 68-207.

and programs among provinces and between Federal and provincial governments. In our chapters on Credit and on Crop Insurance we have emphasized ways in which further co-ordination may be brought about.

Finally the Task Force notes with approval that C.D.A. has created a small Planning Unit in the Economics Branch. Its main function should be to anticipate problems and opportunities and make proposals as to action designed to meet them.

Evaluation is often tiresome, irksome and even agonizing for the program or agency evaluated. Yet it is absolutely essential for good operational performance by government. The Task Force proposes that regular Evaluation Conferences be held annually at which a number of existing programs and policies would be examined by impartial teams of researchers and administrators. These Evaluation Conferences should be sponsored by the National Agricultural Advisory Council, described below.

This section has indicated the operational function of government in anticipating problems and opportunities, planning, implementing and evaluating. Agribusiness and farmers have a role here too and we now turn to a consideration of their roles in the following two sections. Co-ordination is the subject of the final section.

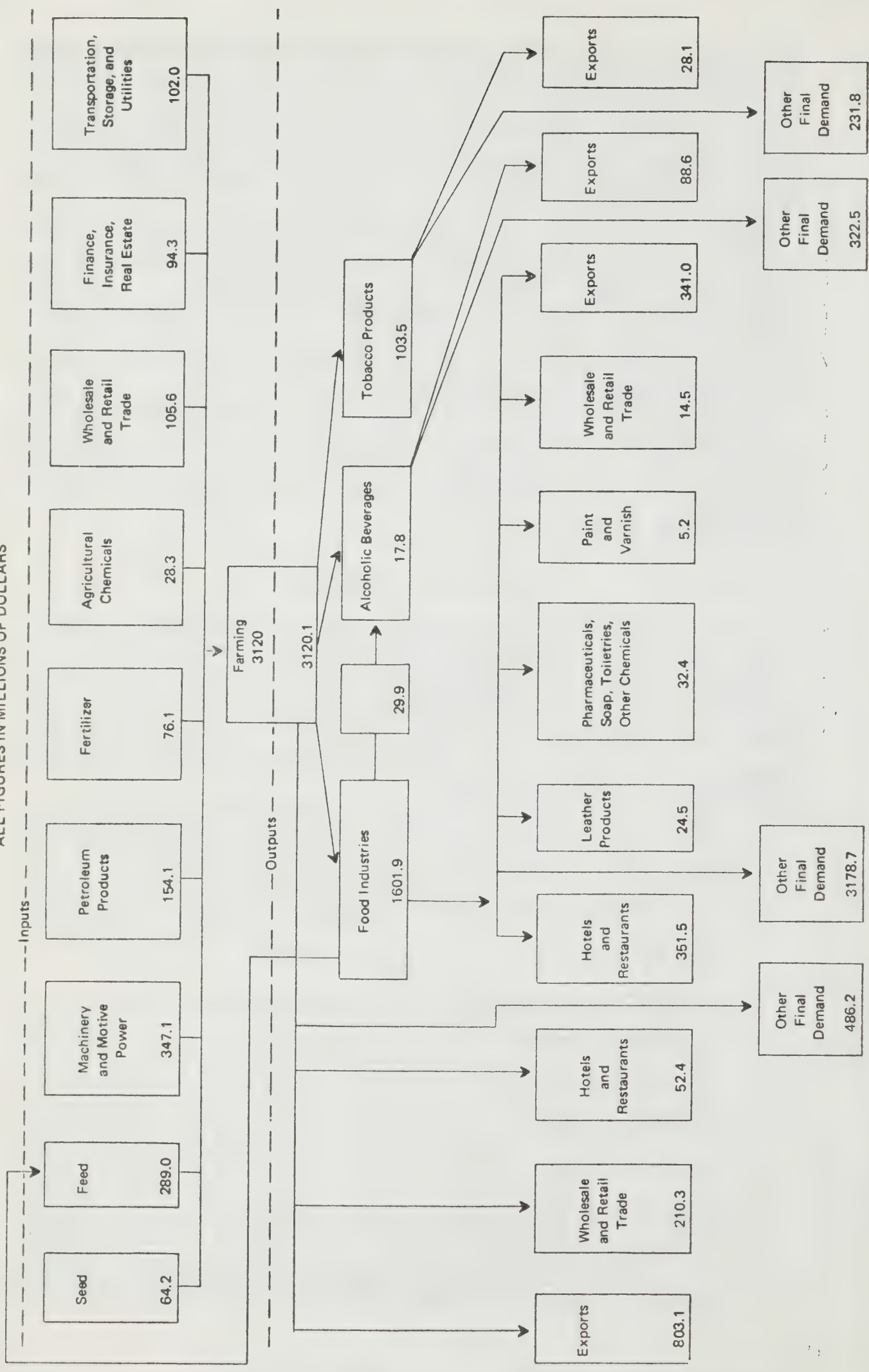
C. AGRIBUSINESS

Although the main reason for the appointment of the Task Force was to study, analyze and recommend solutions primarily for the farm problems of agriculture, it became obvious that any useful study of agriculture must describe, analyze and treat the problems of farming as part of an overall system that processes a flow of resources from farm inputs to the final consumer. Although the several reasons for this are fairly obvious it is appropriate to review them briefly:

1. Farming is a specialized but not isolated activity. Farmers, as any other socio-economic group, interact—maintain economic, social, cultural, and political relationships—with the rest of society.
2. The important segments of the total agricultural system are mutually dependent. The chain is only as strong as its weakest link and if one segment of agriculture is inefficient, unprofitable or unjust, all other parts of the total system are affected.
3. When one important segment such as farming in a system such as agriculture experiences severe problems and faces the necessity to change, there is always a tendency to blame other parts of the system or to hope that problems can be solved by forcing other segments to compensate. Some farmers blame others for their problems and assume that other segments of the total agricultural system are more profitable than is actually the case. Sometimes farmers and farm organization leaders make the statement that industries providing farm supplies and transporting, processing and marketing outputs are “making money at the expense of the farmer”. In addition, such statements often imply that the input and output segments related to farming are doing well in spite of inefficiency because of protection

TABLE 6 AGRICULTURAL FLOW CHART — 1961

ALL FIGURES IN MILLIONS OF DOLLARS



Source: Patterson R.A. — "A Survey of Selected Segments of Canadian Agribusiness", a study done for the Task Force.

from competition. Farmers also frequently take the position that the consumer unjustly receives the benefit of a government-sponsored "cheap food" policy. These charges are worthy of analysis and research.

The Task Force commissioned one study on Canadian agribusiness. One of the results of that study is contained in Appendix A to this chapter. It consists of an input-output table relating to 1961 and shows the dollar flow into and out of various subsectors of agriculture (agribusiness and farming), from other sectors and to other sectors. The importance of agriculture in providing basic materials and in maintaining the demand for output of other sectors becomes apparent from this Appendix.

A Flow Chart of Agriculture, 1961

For indicative purposes only—indicative, that is of the disparate and far-flung sectors which make up agriculture—we refer to Table 6. This table was derived from the input-output data in Appendix A and presents in graphic form the flow of resources from various industries to farms, the combining of these resources with land labour and livestock on farms to produce an expanded flow forward to intermediate and final users.

Efficiency and Profitability

It is not easy to assess the levels of efficiency or profitability of firms and industries. The concept of *efficiency* is fairly straightforward; if one firm can obtain greater output from the same inputs than another, it is more efficient. However, when one compares firms and industries using dissimilar inputs and resources and selling quite different products, it is necessary to introduce prices and values. These may be affected by the degree of competition, the level of tariffs, aggressiveness of labour unions, government programs of manpower training, transportation, taxes etc., degree of integration, the age of the industry or firm and so on. Thus it is difficult to find a fully satisfactory measuring rod for efficiency.

One measure of efficiency or productivity is the value added per man hour. While this is an adequate measure of performance in manufacturing over a period of time for any one industry, it does not tell us if full advantage is being taken of opportunities for increased efficiency and profits in the form of new investment.

On the basis of value added per man hour as a measure of manufacturing efficiency, the operating efficiency of agribusiness industries can be rated as good and improving.⁹ The managers in the industries are, on the whole, intelligent, capable, hard working men. They are doing the best they can with what they have in the system as it exists. However, increases in efficiency might be achieved with new investment in plant and equipment and rational planning. Due to lack of integration the segments of the system are limited in planning inputs and outputs.

Because of this structure, several industries have overcapacity, too many small plants, and too many marginal operators barely hanging on.

⁹ See Patterson, R. A., "A Survey of Selected Segments of Canadian Agribusiness" a study done for the Task Force.

It would be wrong however, to assume that the bigger the plant or firm the more efficient it must be. Small fertilizer distribution plants may well be more efficient than large ones. Similarly it would be wrong to assume that the newer and more highly capitalized an industry's plant the more efficient it must be. The fertilizer industry in Western Canada provides an example of new, technically efficient plants operating with high levels of overcapacity and consequent economic inefficiency. On the other hand studies of dairy processing firms (see Chapter 7) confirm the usually-expected relationship between small size, inadequate physical plant and high costs.

The measurement of *profitability* also has its pitfalls when one is attempting to compare firms and industries. The most satisfactory measure is rate of return on invested capital but variations in accounting practices among firms, the possibility of maintaining "internal reserves" and so on make it difficult to be precise about relative profitabilities.

Table 7 presents data which indicate rates of return in Taxation Year 1964 for a number of Canadian industries. Columns 1 and 2 are obviously more satisfactory measures of profitability than Column 3 but the latter is perhaps a better indication of the degree to which particular industries account for the marketing margin between original producers and final consumers. In Table 7, the rows which present totals (e.g. Row 12, Total Manufacturing) refer to all industries in that category, not just those given in the table. The date of Table 7 should be read in conjunction with the extensive footnotes appearing in the same Commercial Letter.

Table 7 shows a somewhat better rate of return on investment for agribusiness firms than did a study done for the Task Force¹⁰. The latter showed below-average rates of return for many agribusiness industries.¹¹

Obviously, a profitable industry or firm can attract more capital or retain more earnings for investment in new plant and equipment and for expansion than can an unprofitable one. If reasonably attractive profits are not foreseen, new investment will not be attracted to an industry. Industry returns must be evaluated against alternative forms of investment. In 1969 an investor can get before-tax yields of eight or nine per cent on government bonds with little risk, and ten to 15 per cent on mortgages and a good stock portfolio. In the light of opportunities for returns such as these, an industry after-tax return of less than ten per cent can be said to be unattractive.

¹⁰ Patterson, R. A., op. cit.

¹¹ In the United States, Moore and Walsh (*Market Structure of the Agricultural Industries*, Iowa State Press 1966) drew on separate studies of 14 agricultural industries to carry out a cross-sectional analysis of market conditions in them. Using a seven point scale ranging from very inadequate to optimum they rated each of the industries on the following aspects of performance: (1) efficiency of the organization of the industry in terms of scale of plant, utilization of plant, procurement and distribution; (2) promotion expenses; (3) product quality; (4) improvement of product and technique; (5) output consistent with the optimum allocation of resources; and (6) profits at levels which reward investment, efficiency and innovation at necessary but not excessive rates. Based on their evaluation of the foregoing factors, their rating of net market performance for most of the agricultural industries varied around "inadequate". Only one of the 14, apple processing, was rated as high as "adequate". The separate case studies were carried out and published by separate authors in the late 1950's and early 1960's. The 14 industries covered are grocery retailing, meat, broiler chickens, fluid milk, ice cream, vegetable processing, apple processing, baking, soyabean processing, grain procurement, mixed feed, cotton, farm machinery and fertilizer. Many of the studies are from PhD theses or books.

TABLE 7
Corporate Ratios From Selected Canadian Industries Taxation Year 1964

Industry	After-Tax Profit as % of Net Worth	% Return on Total Invested Capital	% Profit on Sales
MANUFACTURING			
1. Slaughtering and Meat Packing.....	8.1	8.1	.9
2. Dairy Products.....	9.5	9.2	2.0
3. Fruit and Vegetable Canners and Preserves.....	7.7	7.2	3.4
4. Grain Mill Products.....	8.5	8.5	1.5
5. Bakery Products.....	7.6	7.0	2.6
6. Distilleries and Wineries.....	21.8	20.9	12.6
7. Breweries.....	10.1	9.4	6.8
8. All Clothing and Apparel.....	10.7	10.6	2.4
9. Agricultural Implements.....	6.0	5.7	3.2
10. Motor Vehicles.....	13.4	13.3	3.7
11. Fertilizers and Industrial Chemicals.....	9.7	9.1	5.8
12. <i>Total Manufacturing</i>	8.5	7.9	3.8
TRANSPORTATION AND DISTRIBUTION			
13. Railways.....	3.4	3.4	7.8
14. Truck Transport.....	14.2	13.2	3.7
15. Pipelines.....	16.7	9.2	21.5
16. Grain Elevators.....	7.1	7.2	12.1
17. Radio and Television Broadcasting.....	24.3	20.1	11.1
18. Electric Power.....	6.6	5.6	11.1
19. Gas Distribution.....	4.6	4.9	4.7
20. <i>Total Transportation and Distribution</i>	6.5	5.7	8.3
WHOLESALE TRADE			
21. Livestock and Grain.....	7.8	7.7	1.1
22. Food Products.....	10.9	10.6	1.1
23. Clothing and Dry Goods.....	9.6	9.2	2.1
24. Electrical and Farm Machinery.....	14.4	13.9	2.4
25. Lumber and Building Materials.....	10.5	10.2	2.1
26. <i>Total Wholesale Trade</i>	12.0	11.7	1.9
RETAIL TRADE			
27. Food Stores.....	10.0	8.9	1.5
28. Motor Vehicles Dealers.....	11.8	11.5	.9
29. Fuel Dealers.....	10.3	9.7	2.3
30. <i>Total Retail Trade</i>	10.9	10.3	1.8
SERVICE			
31. Advertising.....	16.3	15.4	3.7
32. Restaurants and Taverns.....	16.2	15.1	3.5
33. Funeral Directors.....	16.5	15.5	10.5
34. <i>Total Services</i>	13.2	12.1	5.7
35. <i>Total All Companies</i>	6.8	6.0	3.8

SOURCE: The above Table has been taken from statistics presented by the Canadian Imperial Bank of Commerce in their May, 1967, Commercial Letter. Rows 12, 20, 26, 30, 34 and 35 refer to *all* industries, not just those listed in this Table.

A measure of profitability based on taxation statistics is not precise; it is an average for a whole industry and does not indicate the range of profitability. If an industry shows a return on investment of nine per cent, it is likely that there are at least a few companies within it making from 15 per cent to 20 per cent and others making little or nothing.

Vertical Integration

Vertical integration is usually looked at from the farmer's point of view and particularly from the point of view of farmers who are not themselves directly involved in it. It is often condemned unless it is farmers themselves who, through their co-operatives, are doing the integrating. Vertical integration is occasionally looked at from the total efficiency point of view, at which time the virtues of improved scheduling, more widespread use of technical know-how, credit for expanded operations and the favourable effects of all of these on costs and efficiency are noted. Examples quoted are of the greatly reduced costs of broiler production in the United States. The converse side is emphasized by anti-integrators, who point to the transition of once independent farmers to the status of non-unionized employees working on commission, who are even then not rewarded very handsomely.

Vertical integration should also be looked at from the point of view of the agribusiness firms doing the integrating. Why integrate? Obviously integration would not occur unless the integrator estimated that integration would be more profitable than non-integration. This situation may arise for several reasons. (1) A marketing board may have succeeded in raising the farm price sufficiently high that there are profits for an agribusiness firm which enters the farm production stage. This seems to have been the case for a number of vegetables processed in Ontario. (2) Existing producers have failed to adopt available technology which would reduce costs. This has been partly the case with the broiler industry. (3) Processors are unable to secure a continuous supply of the desired grade of a farm product. These may be isolated cases illustrating this reason but they are not widespread. (4) Agribusiness firms want an assured market for their output of feed, chicks or other products. This is probably the dominant reason for vertical integration in poultry production although (2) above probably applies as well.

The Task Force has taken the position that government should regulate and manage agriculture as little as possible but rather attempt to provide a satisfactory climate for low cost and stable production and marketing. Translating this principle to the question of vertical integration implies that governments would take no continuing action either to promote or prohibit vertical integration by agribusiness. Governments should however, continue to provide the legislation under which marketing boards operate, and may create other institutions which affect the spread of vertical integration.

Government Services and Agribusiness

It is natural that government activity in agriculture has been oriented toward the farming sector rather than toward agribusiness or even consumers. Farms, after all, are small and cannot afford to undertake research as some of the large agribusiness firms can. Competition among farmers is taken for

granted and is in fact reduced or modified by the creation of marketing boards made possible by legislation; by contrast agribusiness firms are subject to the Combines Investigation Act. The result of this orientation may be seen in the Canada Department of Agriculture which has few specialists in the problems and opportunities of agribusiness.

The Task Force proposes that the name of the Canada Department of Agriculture should be changed to the *Department of Agricultural Industry* to emphasize the fact that "agriculture" is much more than "farming" and that an industry-wide approach is desirable in our present interdependent and sophisticated economy. In keeping with this change of name, an Agribusiness unit should be created in the Economics Branch (to become the Economics and Business Branch). It is desirable that some of the specialists from the Department of Industry Trade and Commerce be brought to this unit and that co-ordination between the two departments be emphasized.

Exporting of agricultural products is done primarily by agribusiness firms, although some marketing boards have been involved. The importance of exports to all stakeholders in agriculture, and the close relationship of agribusiness firms and export activity make it logical that there be an International Trade Branch within the Canada Department of Agricultural Industry. As with the Agribusiness unit, it is essential that some of the specialists from the Department of Industry Trade and Commerce be brought to this new unit in Agricultural Industry. These people should work very closely with Canadian International Development Agency in regard to shipments of food aid, and with the new Export Development Corporation in regard to credits and assistance in exporting.

D. FARMER ORGANIZATIONS

There are over 10,000 identifiable local, provincial and national farmer organizations. Most of the provincial and national farmer organizations have district or local units; for example a provincial marketing board may have county committees and a regional co-operative may have many locals. In addition to strictly farmer organizations such as co-operatives, marketing boards and breed associations, there are thousands of local bodies such as horticultural societies and community improvement associations which draw upon farmers for membership. As a result of there being two general farm organizations at federal and provincial levels, many local units of each and large numbers of co-operatives and specialized commodity and breed organizations (some also with local units), two fundamental questions arise, "Are there too many farmer organizations?" and "What would be the most rational system of organization?" Before turning to these questions, it may be useful to compare farmer organizations with those in other sectors.

In professional associations such as those of doctors, lawyers and accountants, members normally must be accepted by the association in order to practise, and they must abide by the regulations and be subject to the discipline of the association. Thus associations exercise power over entry and impose discipline for non-professional behaviour of members. Farmer organizations do not have these powers except to a limited extent in those provin-

cial marketing boards in which a quota is necessary for production. Quota transfers are normally subject to board approval and thus there is some possibility of restriction on entry. There is no discipline exercised over members' actions by farmer organizations.¹² This is as it should be.

In labour unions individual workers cannot choose whether to join Union A or Union B. They can belong to only one union and federal and provincial labour legislation provides for voting procedures to determine what that union shall be. There are close structural parallels between the Canadian Labour Congress on the one hand and the Canadian Federation of Agriculture on the other. Both are federations whose members are organizations, not individuals and each claims to speak for a majority of union members and farmers respectively. Because there are no farmer organizations with power comparable to that of, let us say, the United Auto Workers or the Steelworkers, the Canadian Federation of Agriculture tends to have a more influential place within its sector than does the C.L.C. It becomes involved in preparing and presenting briefs to governments concerning commodities (such as wheat) as well as principles (such as taxation).

In business associations such as the Canadian Chamber of Commerce or trade associations such as the Meat Packers Council of Canada, membership (by firms) is entirely voluntary and no control can be exercised over members or over non-members in that sector. Attempts to exercise control over members would involve violation of the Combines Investigation Act. This situation is quite contrary to that in farming, in which governments provide the enabling legislation under which farm firms are able to work in combination through marketing boards to attempt to achieve their ends. Trade associations frequently are able to play a role useful to their members, but by its nature, much of the benefit accrues also to non-members. The same may be said to be the case with a number of farmer organizations—The Farmers' Unions for example. This is at the root of one of the primary financial problems of either trade associations or "direct membership"¹³ farmer organizations, namely, that non-members frequently receive almost the same benefits as do members, thus reducing the incentive to join.

This brief review of the organizations of professional people, labour and non-farm businesses points up some of the present features of farmer organizations. These features are:

1. Farmers may be members of many organizations, some of which may be in opposition to others. This is less likely to be the case with direct membership organizations. It is especially the case when marketing

¹² An exception arose in 1969 in the Ontario Farmers' Union during the provincial vote on a General Farm Organization. Members of O.F.U. provincial and local executives were removed from office for favouring the G.F.O. This in no way, however, interfered with their ability to continue farming.

¹³ The term "direct membership" refers to those organizations whose members choose voluntarily and periodically to join or continue their membership. The Farmers' Unions have annual memberships and fees; membership in a co-operative is voluntary but once this step is taken further decisions to continue membership are not necessary. At the other extreme from direct membership organizations are provincial marketing boards. In some cases they were last voted upon fifteen or more years ago; it is unlikely that a majority of present producers of the commodity regulated actually voted in favour of the marketing board. This is not necessarily a criticism because it is possible to petition for a re-vote.

boards make deductions per unit of product or when property taxes are used to finance farmer organizations. The principle that farmers should be free to join as many farm organizations as they see fit is in contrast with the "no dual membership" rule of labour unions. A "joiner" could have a field day as a farmer.

2. There are no restrictions on entry into production except for those few products for which marketing boards have created production or sales quotas. This is in contrast with professional associations and unions with "closed shop" arrangements.
3. The two contrasting principles of organization appear to be those of a) voluntary, direct membership as in co-operatives and Farmers' Unions, and b) compulsory participation, for instance by majority (or greater) vote on the establishment of a marketing board. The first has the advantage that those induced to become members are likely to be actively interested in the organization. It has the advantage also that the executive and directors are always aware of the necessity of maintaining member (and potential member) interest and involvement.

An advantage of the second form of organization is that there is not likely to be the same scramble for funds and preoccupation with internal financial matters as in the case of direct membership bodies. Another advantage is that, for certain activities, compulsory features are necessary and voluntary membership and participation are unlikely to be successful. Compulsory powers stem from governments. The possibility of a voluntary membership body achieving lasting success through collective bargaining or withholding members' output from market is limited.

Direct membership bodies such as the Farmers' Unions are likely to be more militant, in order to stimulate interest and support, than are indirect membership bodies like the Federations. The desirability of militancy varies depending upon issues and conditions and no blanket support or condemnation of it is intended.

One of the most relevant developments in the history of farm organizations occurred in the summer of 1969 when farmers in Ontario were asked to vote on the principle of creating one General Farm Organization which could have been financed by a levy on all farm products sold. The fact that almost 60 per cent of those voting were opposed to the G.F.O. indicated an unwillingness to try anything radically different from the conventional farm organizations to which they were accustomed.

Are There Too Many Farmer Organizations?

In principle the answer is "yes" because the existence of a large number of organizations dissipates leadership and organizational resources in too many directions. It becomes almost impossible to speak with a unified voice to governments or to other sectors when two or more farmer organizations are attempting to "represent" farmers and often to bid for their support. Cynics

say that governments prefer that there be more than one organization representing a given sub-sector of farming so that one can be played off against another.

There is another side to the coin. Most farmers are not single product producers; a farmer in Quebec may market industrial milk, hogs, beef, and pulpwood or a farmer in Ontario may sell soybeans, white beans, corn, winter wheat and hogs. The most appropriate marketing institutions for soybeans are likely to be quite different from those for hogs or pulpwood. There is an essential difference between a multi-product farmer and a single-activity person like a carpenter or an accountant. For the latter a single organization is certainly more appropriate. For the former, who is a soybean producer and a hog producer, there is at least a better case for having separate organizations to concern themselves specifically with each activity.

Nevertheless it is probably the case that many farmer organizations were born to meet a specific need but have persisted long after the need has disappeared and their role had been fully played. Too often executives of an organization do not want to be the group responsible for its final dissolution and they keep it going for "one more year". Vested interests, especially among employees and older directors, add to the apparent permanence of supposedly temporary bodies. Just like government programs, however, farmer organizations need periodic evaluation.

What is The Most Appropriate Form of Farmer Organization?

This question is certainly a legitimate one but any final answer must ultimately come from farmers themselves, because the most ideal form of organization can be successful only if it is wholeheartedly accepted by its members. In the United States there are four major farmer organizations and in Great Britain there is one.¹⁴

There are three major alternatives in farmer organizations. One is, of course, to continue the present structure. The rivalry of the direct membership Farmers' Unions with the indirect membership Federations of Agriculture in seeking programs advantageous to farmers probably means that the two bodies, working separately, are less effective in the short run than if they could speak as one. Yet the same rivalry helps to keep both more active than would otherwise be the case and over a period of years the results may be favourable.

A second alternative would be to merge all existing organizations into one big body similar to the National Farmers' Union of England and Wales. Commodity marketing boards would become adjuncts of the main body and there would be commodity committees for those products and provinces for which there were no marketing boards. Thus the "Beef Committee" of the main body would be allocated specific responsibility for all action on behalf of farmers concerning beef production and marketing. This type of organization would be the type appropriate to a widespread system of supply manage-

¹⁴ This is not quite true. There are two National Farmers' Unions—one for England and Wales and one for Scotland—but they work together closely and harmoniously.

ment in which the effects on other commodities of supply management of one product would be taken into account. It would be the kind of all-pervading farmer organization discussed in Chapter 12 on Marketing Boards.

Regardless of the merits of this kind of organization—and the Task Force has very serious doubts about it—it is virtually out of the question because most existing organizations and especially marketing boards, would be unwilling to merge themselves in any way which would seriously reduce their autonomy. Much of its financing might come from a compulsory checkoff, which has the merit of ensuring that funds will be available but the disadvantage that the organization may lose its aggressiveness and drive. If financing comes from voluntary direct membership then the problems of unstable finances and unequal sharing of costs between members and non members become relevant.

The third form of organization would be to retain almost all the existing bodies but for the Farmers' Unions to enter the provincial and national Federations of Agriculture as *the* direct membership bodies. The Farmers' Unions would then be a part of one federated body and the duplication of voices and of effort would be eliminated. Attractive though this structure appears, it suffers from a possible defect. As part of the Federations (provincial and Canadian) the Farmers' Unions might find that they had lost a good deal of their appeal to members and potential members because there would presumably be identity of policy between the Federation and the Farmers' Union. The result might well be the decline of the Unions.

The Role of Farmer Organizations

The key to a discussion of the most appropriate structure of farmer organizations appears only when one turns to the question of objectives. What objective should organizations play and are the objectives identical for different organizations?

Basically the general objective of every farm organization should be to improve the economic lot of its members and in some cases also to improve social and educational standards of members and perhaps of communities. Generally speaking, farmer organizations are not and should not be philanthropic agencies. When they appear before governments they must always keep the welfare of their members in mind. Obviously there are many times when it would be self-defeating to push for special treatment; good strategy and tactics both demand flexibility.

Now if the purpose of a marketing board is to increase the income of its members as much as possible and over a period of time, then one cannot expect marketing boards to sacrifice members' interests for the national interest. This is well illustrated in the case of the Ontario Flue-cured Tobacco Growers Marketing Board, whose actions have been designed to benefit the 4,500 tobacco growers, not the farmers who might have benefitted from more liberal tobacco quota policies. Since the powers of such boards are derived from provincial governments, whose responsibility it is to be concerned about all of the people of the province, then it is the government of the province which should be concerned, and possibly take action, if a marketing board injures others.

A farmers' Union, being a direct membership body and without specific commodity biases, has very little scope to act for its *own* members only. Any benefits and any harm, which it produces fall alike on the heads of the members and non-members. Only a body like a present Federation of Agriculture can claim to represent all farmers—whether all farmers *want* to be so represented is another question and one to which the answer is *not* clear.

For effectiveness in dealing with governments and other sectors however, there is a great deal to be said for having a federated structure which can lay legitimate claim to speak for all farmers without farmers having chosen to pay dues for direct membership in any component of the organization.

Thus the Task Force is driven to the position of concluding that there must be a federation, that there should be a direct membership body, that there must be autonomous co-operatives and marketing boards. In other words, the present structure may be as good as any other so far as the main bodies are concerned. There are many smaller, antiquated bodies, however which may be as out of date as some agricultural programs, some farmers and some economists. Such organizations should be subjected to careful evaluation by their members.

In the final section of this chapter, we turn to the question of attempting to relate farmer organizations and farmer representatives to agribusiness and to government. This is probably a more important matter than the particular form or number of farmer organizations.

Of equal importance is the capacity of farmer organizations to perform the four operational functions discussed early in this chapter. They must be able to anticipate problems and opportunities, plan and recommend programs, implement programs themselves or persuade others to do so and evaluate.

E. THE CO-ORDINATION OF POLICY MAKING

After the rather prolonged discussion in the preceding three sections on each of government, agribusiness and farmer organizations, we come at last to the subject of co-ordination of the three. How can farmer organizations best provide an input into the policy-making process? Does the fact that governments are responsible to parliaments rule out lengthy and detailed discussion of policy decisions between governments and agribusiness and farmers? How can there best be an intelligent responsible input of views and information by these three groups, all of which will be vitally affected by the decisions made and by the attitudes of the other groups?

Figure 2 is central to the answers the Task Force proposes to make to questions concerning co-ordination in policy making at the national level. To have introduced the relationship with provincial governments into Figure 2 would have made it too complicated visually for presentation. We turn now to a discussion of Figure 2.

1. The Minister of the Department of Agricultural Industry must occupy the key place in agricultural policy making. Some one person—in this case

the Minister of Agricultural Industry—must be held responsible for seeing that the four operational functions discussed above are in fact adequately performed. The “Troika” for wheat and coarse grains must disappear in favour of one seat of ultimate responsibility. As noted above, the Department must include responsibility and concern for agribusiness and trade as well as for farming.

2. Government service units are shown on the left hand side of Figure 2.

- (a) The Research Branch has been discussed in Chapter 15 on Research; it has become a major centre for high powered scientific researchers. Much of the research is fundamental, as opposed to mission-oriented and some shift in emphasis toward the latter seems to be appropriate.
- (b) The Economics Branch should become the Economics and Business Branch, and a new unit working on problems and analysis relating to agribusiness should be formed in the Branch. This Agribusiness unit should draw much of its staff from the Department of Industry Trade and Commerce.

In research there has never been adequate integration of the C.D.A. economists with the scientists and engineers of the C.D.A. Research Branch. Not only must there be an increase in the amount of research in economics and rural sociology but there must be on-going machinery for co-ordination between the economists and other researchers. Many statements of good intention in this regard have been made in the past. The Task Force proposes that the heads of these two branches be requested by the Minister to produce a joint proposal as to the machinery which will ensure co-ordination.

The Planning Unit recently created in the Economics and Business Branch should have as one of its duties the improvement and up-dating of the Materials Balance approach of the Task Force. This unit should be the nerve-centre of the whole Department in anticipating problems and opportunities.

- (c) A new International Trade Branch should be created to ensure the required level of knowledge and analysis within the Department for all matters connected with trade. Some of the specialists on wheat and coarse grains now in the Department of Industry Trade and Commerce should become part of this Branch.

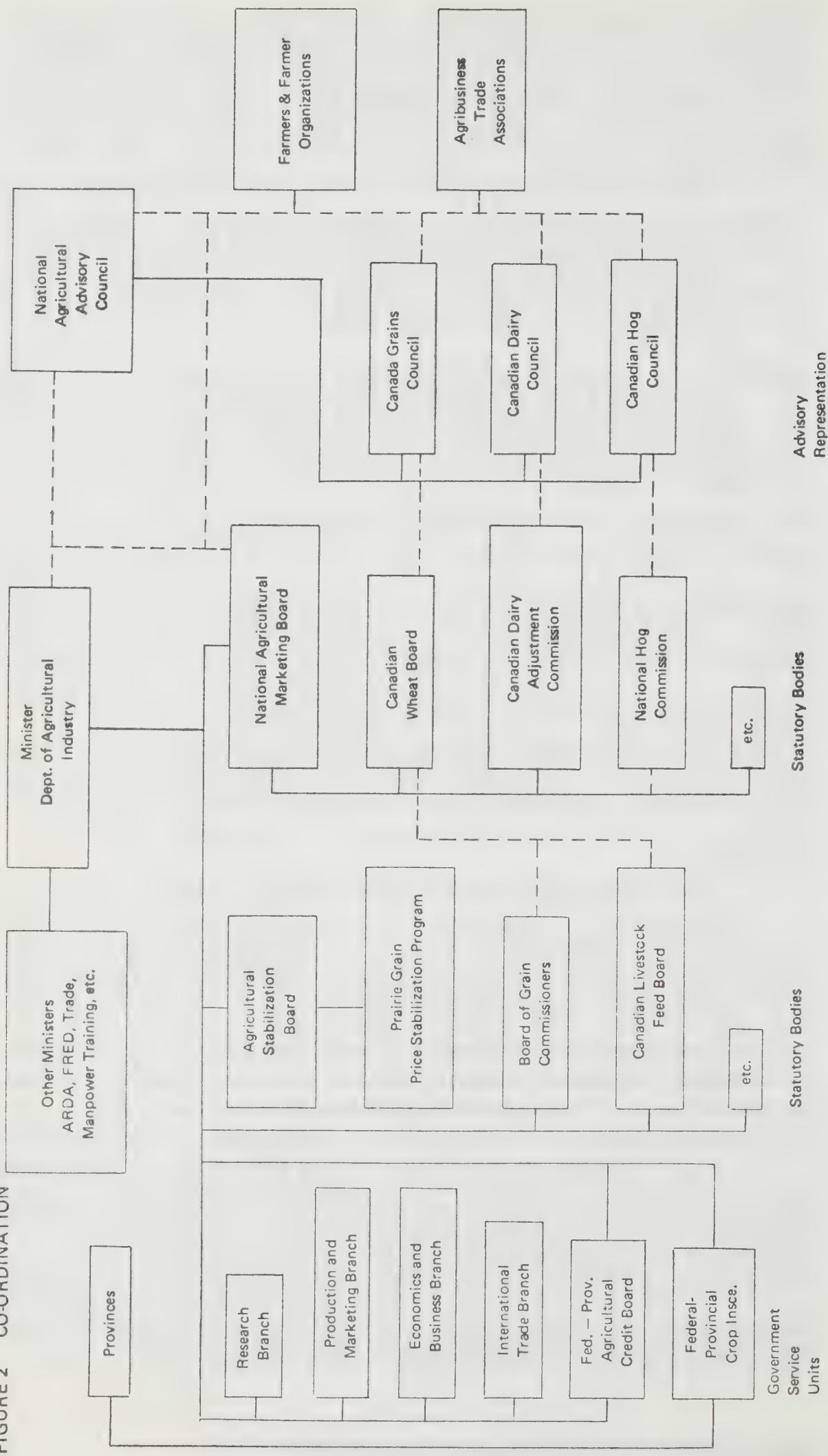
4. A Federal-Provincial Agricultural Credit Board is proposed in Chapter 13 on Credit. This Board would co-ordinate joint credit programs between the Federal and various provincial governments (or regions).

5. Federal-Provincial Crop Insurance is recommended in Chapter 14.

6. The Board of Grain Commissioners would retain its present shape and function but should be more closely related to the Canadian Wheat Board, which would become part of the Department of Agricultural Industry, under Task Force proposals (See 10 below).

7. The Canadian Livestock Feed Board should be phased out. The Task Force proposes to free coarse grain marketings on the Prairies and to reduce and transform Feed Freight Assistance. (See Chapter 5).

FIGURE 2 CO-ORDINATION



8. The Agricultural Stabilization Board should remain in approximately its present form but to its duties should be added the very important new role of operating the Prairie Grain Price Stabilization Program which is a key recommendation of our chapter on Wheat, Feed Grains and Oilseeds. The Program is intended to provide an important element of price stability and (with the Federal-Provincial Crop Insurance program) to provide greater stability of farm income. Furthermore, it should be responsible for the short-term emergency Wheat and Barley Acreage Diversion Program (Chapter 5).

9. National Agricultural Marketing Board. This is one of the two most important bodies proposed in Figure 2. The N.A.M. Board would fulfil a function in the national scene very similar to that of the Ontario Farm Products Marketing Board in Ontario and the other government-appointed boards responsible for provincial commodity marketing schemes in other provinces. The N.A.M. Board would be responsible for all national marketing boards, including the Canadian Wheat Board and so long as it is in existence, the Canadian Dairy (Adjustment) Commission. This responsibility would entail administering national marketing board legislation, issuing regulations, deciding upon the appropriate form of commodity boards,¹⁵ reviewing their activities, appraising their plans and maintaining general supervision of their operations. The N.A.M. Board must also appoint the members of the councils discussed below.

The N.A.M. Board must be a statutory body; we suggest that it have 8 to 12 members appointed by the Federal Government on a rotating basis. Members should not be appointed as "representatives" of any group, but should be appointed for their qualities of judgment, experience and ability. Alternatively, if a larger number of members is considered desirable, a small executive committee would be necessary. The N.A.M. Board would require a small secretariat and a number of researchers, the latter preferably co-opted for several-year periods from the Economics and Business Branch.

10. The Canadian Wheat Board and other national commodity marketing boards should be responsible to the N.A.M. Board and through it to the Minister of Agricultural Industry. Each of the national marketing boards may be different in structure and operation from the others. Very close co-operation is essential between national boards and provincial commodity boards as well as between the Federal and provincial governments.

Associated in an advisory capacity with each national marketing board should be a council, described below.

11. Canada Grains Council, Canadian Dairy Council etc. should be advisory bodies to the statutory marketing board or commissions to which they correspond. The Canada Grains Council, already in existence, is the prototype for these councils. They should consist of representatives of farmer organizations including co-operatives and agribusiness and in some cases of university and other interested groups. Appointment to such councils should be by the N.A.M. Board upon nomination of representatives by the appropriate groups as selected by the N.A.M. Board.

¹⁵ In Chapter 12 on Marketing Boards we point out that they may be of many different forms and with different functions and powers.

To take the Canada Grains Council as an example, it should be advisory to the Canadian Wheat Board in regard to prairie grain marketing. If a National Oilseeds Board were created to market let us say rapeseed and soybeans, the Canada Grains Council would be advisory to it.

The Council has members from interested groups outside the Prairies but if there were to be new national marketing boards created, the Council membership would probably have to be expanded to provide adequate representation.

Each council should appoint at least one member and perhaps more depending upon the importance of the sector, to the National Agricultural Advisory Council.

12. The National Agricultural Advisory Council should rank, along with the N.A.M. Board, as one of the two most important bodies in Canadian agricultural policy making. The N.A.A.C. would become the formal advisory body to the Minister of Agricultural Industry as well as to the N.A.M. Board. The N.A.A.C. would consist of a fairly large number of members, almost all of whom would be nominated by the various councils and farmer organizations and agribusinesses and trade associations. Appointment would be by the Minister of Agricultural Industry and for such periods as to allow rotation of membership.

The N.A.A.C. should conduct annual Policy Evaluation Conferences to receive and discuss evaluation reports prepared by independent researchers. These reports should be commissioned by N.A.A.C. to evaluate specific policies and programs of the Federal Government or to evaluate joint Federal-Provincial programs.

The N.A.A.C. should provide a kind of parliament for agriculture for the discussion of policies and problems of the entire industry.

13. The two general farmer organizations—The Canadian Federation of Agriculture and the National Farmers' Union—would of course be free to approach government but should play a prominent role in the activities of the N.A.A.C. The Task Force recognizes clearly that on some matters the corresponding farmer and agribusiness organizations may have opposing interests as well as common interests. Neither group can be forced to become participating members of the N.A.A.C. against their will and both must remain free to pursue their own objectives independently. Their participation in N.A.A.C., however, would give them an opportunity to discuss particularly those areas of common concern.

RECOMMENDATIONS

1. The primary and continuing role of governments should be to produce a desirable economic and social climate for farmers and agribusiness. Economically, governments should promote the efficient use of resources through their support for research, extension, education, marketing services and from time to time, through legislation or funds to increase or stabilize prices and incomes. This role does not include "managing" agriculture any more than it is the role of governments to "manage" the steel industry or the

pulp and paper industry. Because the firms in farming are smaller than in other sectors, the kinds of government services required to create a desirable climate for them will be different from those of other sectors.

There are social as well as economic aspects to all policies. Governments and their officials must always be aware that they are dealing with human beings and not with abstract problems. Programs which call for changes in the way of life of the poor, the disadvantaged and the aged in particular, must reflect this point.

2. *Flexible Approach to Policy Making.*—Experience indicates that a doctrinaire approach to the development of agricultural policy is unsound. The diverse and dynamic conditions of Canadian agriculture makes a pragmatic approach desirable. This flexibility appears again and again in our recommendations.

3. *Stated Goals.*—The controversies which surround many agricultural policies and programs arise in large measure from their lack of clearly defined goals. The Task Force recommends that for each of its policies and programs, governments provide a clear statement of goals; such statements should be so explicit and sufficiently quantified that the degree of success in achieving them can later be measured. Goals should not be stated in such general terms as “to improve the welfare of farmers”. Those goals, and performances in achieving them are considered in Recommendation 14(b).

4. *Recognition of Commercial-Low Income Division.*—Programs which try to serve the interests of commercial farmers and to meet the problems of poverty-level farmers are unlikely to be as successful as separate (but co-ordinated) programs designed to serve each. The Task Force recommends that this distinction be kept in mind in all policy making. The government should not confuse economic and welfare problems and programs to overcome them.

5. The Canada Department of Agriculture should be renamed the Department of Agricultural Industry. All of its planning and operations for commercial agriculture must be integrated around a central concept of a profit oriented, self-sustaining industry serving the needs of all its major stakeholders adequately and fairly. A major function of the Department of Agricultural Industry would be to integrate all direct Federal government expenditures on agriculture through a centralized budgetary control system.

6. Overall authority and responsibility for commercial agriculture at the national level must be centred in and around the Department of Agricultural Industry.

7. The Economics Branch should be renamed the Economics and Business Branch. An Agribusiness unit should be created within the Branch to undertake research and analysis of problems relating to agribusiness. Its staff should be drawn from those specialists undertaking similar work in the Department of Industry, Trade and Commerce.

8. The Minister of Agricultural Industry should request the heads of the Research Branch and of the Economics and Business Branch to produce a joint proposal which will indicate the kind of machinery necessary to ensure co-ordination of research efforts between specialists in the two branches.

9. A new International Trade Branch should be created in the Department of Agricultural Industry and many of its staff drawn from the Department of Industry, Trade and Commerce.

10. A new Federal-Provincial Agricultural Credit Board should be created. At the Federal level it should report to the Minister of Agricultural Industry. (See Chapter 13)

11. The Canadian Livestock Feed Board should be phased out if the recommendations of Chapter 5 are implemented.

12. The Agricultural Stabilization Board should be given additional responsibilities in the form of the new Prairie Grain Price Stabilization Program and the short-run emergency Wheat and Barley Acreage Diversion Program.

13. A new National Agricultural Marketing Board should be created, to take direct responsibility for all statutory national or federal marketing boards including the Canadian Wheat Board and the Canadian Dairy (Adjustment) Commission. (See Chapter 7 for change in C.D.C.) The N.A.M. Board should be created by the Minister of Agricultural Industry and bear a relationship to him similar to that of the Ontario Farm Products Marketing Board to the Ontario Minister of Agriculture and Food.

14. A new National Agricultural Advisory Council should be created by the Minister of Agricultural Industry. It should have the following functions:

- (a) to act as the highest level farmer and agribusiness council, providing a forum for discussion and providing advice both to the Minister of Agricultural Industry and to the N.A.M. Board.
- (b) to organize and sponsor an annual *Policy Evaluation Conference* based upon intensive studies by independent researchers of a small number of existing programs of the Federal Government or of joint Federal-provincial programs. Further to Recommendation 3, the goals of the programs evaluated should be clearly and specifically stated.

15. Creation, by the N.A.M. Board, of commodity councils similar to the Canada Grains Council to act in an advisory capacity to the N.A.A. Council and also to their corresponding statutory marketing board (e.g. Canada Wheat Board).

16. The new structure of organizations proposed in the preceding recommendations should make possible vastly improved communication between all three of government, farmer organizations and agribusiness. The concept of the N. A. A. Council and the commodity councils involves participation by agribusiness and farmer organizations.

The Task Force recommends emphatically that the creation of councils should not prevent agribusiness or farmers from communicating directly with government or with one another. The Task Force further recommends that governments consult as often as possible with the other stake-holders in the agricultural industry: for the government to do so, however, implies a corresponding degree of sensitivity and responsibility on the part of the non-government groups.

17. The Task Force takes no position on the issue of "unity" between the general farm organizations. The fact is that this is a matter for farmers themselves to decide and furthermore, the pro's and con's of union appear to the Task Force to be evenly balanced.

18. Both Federal and Provincial governments should design short training programs to make government, agribusiness and farmer leaders and employees better aware of new techniques of management and administration. Management by objectives, program planning and budgeting and other techniques of rational management must be increasingly adopted to improve effectiveness and efficiency.

19. *Recognition of Regional Characteristics.*—While the Task Force warns against the dangers of balkanization of Canadian agriculture and of agricultural policy and emphasizes that increased attention be paid to national unity, it recommends that increased attention be paid to regional problems and disparities during the formulation of policy. We commend in principle those parts of ARDA and Regional Economic Expansion which are adaptable to particular regional conditions and which work through training and similar assistance to help the disadvantaged eventually compete on more or less even terms with those in more prosperous areas.

APPENDIX A

THE CANADIAN AGRIBUSINESS SYSTEM

Businessmen, government leaders, and others concerned with agribusiness, are constantly faced with the tasks of formulating plans, policies and programs at the national, industry and company levels to meet the everchanging needs of domestic and world food economies. If managers, public and private, are to develop effective strategies and policies, they must be fully aware of the total commodity system in which they participate and they must understand the interaction of its parts. What is required in Canada is comprehensive and penetrating presentations, analyses, and evaluations of the commodity systems in the agribusiness industries.

In the United States, pioneering work and some of the best research into agribusiness systems has been carried out at the Harvard Business School by Davis and Goldberg.¹ Although badly needed in Canada, we have no studies of our own commodity systems that approach the work of Davis and Goldberg in quality and comprehensiveness.

To carry out such a comprehensive analysis of the major commodity systems in Canada would require significant commitments of time and resources. Several major research projects would be required at a total cost probably in the range of \$75,000 to \$125,000 and three to five man-years of time. Equally vital would be the participation of industry and government.

Since its terms of reference were primarily concerned with farm problems, the Task Force limited its research to a relatively small three-month, one-man project aimed at approaching existing information. It is obvious, therefore, that this chapter cannot be a definitive analysis of any or all of the agribusiness industries. An attempt has been made, however, to make a brief survey of the major industries through organizing what data are available and to point the way towards further studies in greater depth.

Perhaps the best way to gain some understanding of the overall size, scope, and structure of Canadian agribusiness is to review an input-output matrix patterned after Leontieff's technique of interindustry analysis. The input-output matrix presented in Exhibit 1 was compiled from the computer printouts made available by D. B. S. officials, whose cooperation and assistance were of great help. Several matrices were available, in varying degrees of detail. The 65 industry by 65 commodity matrix figures were used.

On the assumption that most readers will be unfamiliar with such a matrix, we shall begin with a brief explanation of what it represents.

An input-output chart may be likened to a double-entry bookkeeping system which shows purchases from and sales to each of the sectors of the economy. Each sector will buy and sell from the others in varying proportions but the end result is that total purchases will equal total sales; that is,

¹ John H. Davis and Ray A. Goldberg, *A Concept of Agribusiness* (Boston: Harvard University, 1957). Ray A. Goldberg, *Agribusiness Coordination: A Systems Approach to the Wheat, Soybean, and Florida Orange Economies* (Boston: Harvard University, 1968).

GSS Table 6 Col. No.

Source: *Ordnance Survey*.

total inputs equals total outputs. Again to use the accounting analogy, an input-output table is similar to a balance sheet in that it represents a state of affairs at one point in time. Exhibit 1 is based on 1961 data and the relationships shown by it will not be exactly the same for other years.

Exhibit 1 depicts, in summary form, the dollar flow of resources, goods and services through agribusiness and the rest of the economy in 1961, both by industry of origin and by industry of destination. The horizontal rows, as read from left to right, trace how the output of each sector of the economy is distributed among the other sectors. The vertical columns, as read from top to bottom, trace how each industry obtains or purchases its needed inputs of goods and services from the other sectors.

In an ideal matrix or input-output chart based on interindustry flows, each industry sector would appear in identical form, both as a selling entity on the side and as a purchasing entity at the top of the chart. The totals of each sector—if expressed in dollar terms—would be equal when added vertically and horizontally, and the sum of all sectors, would be the input and output totals for the national economy. However, a matrix of such detail would be unwieldy for the purpose of this study in that it gives unnecessary emphasis to non-agribusiness sectors of the economy. Hence, in Exhibit 1, only those industry sectors of importance to agribusiness have been designated in the purchasing sectors across the top and other transactions have been grouped into summary sectors. Similarly, some groupings were made for the producing sectors down the side, although the complete D. B. S. listing of sectors is also shown. Thus, while in essence the whole economy is represented in the flow of goods and services shown in the matrix, this specific arrangement of sectors more or less limits the use of the matrix to the particular purposes of this study.²

The D. B. S. matrix we are using does not balance inputs with outputs perfectly on an individual industry basis because the columns (titled across the top) represent industries and the rows (titled down the side) represent commodities. The total for any one industry column will not necessarily balance with the total for the corresponding commodity row because a commodity may be produced by more than one industry. The differences are not great, however, and for descriptive purposes we shall treat the commodities as industries. For example, the total input to agriculture shows as \$3,-120,100,000 (row 75, column 1) while the total output of agricultural products shows as \$2,813,300,000 (row 1, column 27). Although there are these varying differences between industries and corresponding commodities, they are approximately the same and the final total inputs and outputs are roughly in balance (row 75, column 27).

At the top of Exhibit 1 are two rows of column numbers. The top row is the numbers of the columns in the D. B. S. matrix from which the figures were taken, a 65 industry by 65 commodity matrix. The second row is merely the consecutive numbering of the columns we are using and is the set of column numbers that we shall use. As mentioned previously, we have not

² Davis and Goldberg, *A Concept of Agribusiness*, pp. 25-29. We have used and quoted liberally from the Davis and Goldberg explanation of the input-output matrix.

listed all of the individual industries as many of them are not part of agribusiness. Column 21 is the total of all other industries not listed in columns 1 to 18. Column 20 corresponds to D. B. S. column 66 which is the total for all industries (D.B.S. columns 1 to 65). Column 19 is the sub-total of columns 1 to 18. Column 21, which is column 20 minus column 19, is therefore the aggregate of all other industries not specified in columns 1 to 18. Column 28 is the total for the food industries (columns 2 to 8) and column 29 is the total for all beverages (columns 9 and 10). In the rows listed at the left the entire 75 D. B. S. listings have been shown and the aggregations we require for agribusiness have been derived from them as shown in rows 76, 77 and 78.

To facilitate an understanding of Exhibit 1, let us examine the sector of Feed, Flour, and Cereals, row 11, and trace selected input-output relationships pertaining to it. Reading from left to right along row 11, the transactions reflected in each column may be viewed either as sales or purchases (depending on whether they are approached from the viewpoint of the sector shown at the left or top of the table). To illustrate, column 6 of row 11 shows transactions between the Feed, Flour, and Cereals sector and the Biscuits and Bakeries sector in the amount of \$60,300,000. From the standpoint of the sector on the left this was a sale, but from that of the sector shown at the top it was a purchase. We first shall look upon transactions from the former viewpoint, thus considering them as sales.

Proceeding from left to right along row 11, the Feed, Flour, and Cereals sector of agribusiness sold \$256,500,000 of output to the Agriculture sector (column 1); \$900,000 to the Meat and Poultry Processors sector (column 2); \$100,000 to the Dairy sector (column 3); and \$300,000 to the Fruit and Vegetable Cannery sector (column 4). Column 5 indicates that the Feed, Flour and Cereals sector utilized its own products in the amount of \$38,200,000. Continuing along row 11, the Feed, Flour, and Cereals sector sold \$60,300,000 of output to the Biscuits and Bakeries sector (column 6); \$800,000 to the Sugar and Confectionery sector (column 7); \$10,100,000 to the Other Food Industries sector (column 8); zero volume to the Soft Drinks sector (column 9); \$2,700,000 to the Alcoholic Beverages sector (column 10); zero volume to the Tobacco Products (column 11), Leather Products (column 12), Paint and Varnish (column 13) and Pharmaceuticals, Soaps and Toiletries (column 14) sectors; \$400,000 to the Other Chemical Industries sector (column 15); \$8,900,000 to the Hotels and Restaurants sector (column 16); \$100,000 to the Other Services sector (column 17); \$5,000,000 to the Wholesale and Retail Trade sector (column 18); and \$8,700,000 to the All Other Industries sector (column 21). The All Other Industries sector (column 21) is comprised of those industries which purchase only minor amounts of goods and services from agribusiness sources.

Columns 1 to 18 (totalled in column 19) plus column 21 together represent all the processing or intermediate sectors of the economy (totalled in column 20); columns 22 to 26 represent categories of end-product demand. This end-product demand represents the final consumption of the goods and services produced in the processing sector. For example, the Feed, Flour, and Cereals sector sold \$68,900,000 to the Exports sector (column 22); zero

volume to Re-Exports³ (column 23); it imported \$7,700,000 of its goods (column 24); it put \$2,600,000 of its goods into inventory (column 25); and it sold \$90,200,000 to the Other Final Demand⁴ sector (column 26). Column 27, entitled Total Output, represents the value, at producer's prices, of all the output for each industry sector. The Feed, Flour and Cereal sector had a total output of \$547,000,000.

Having examined the output of the Feed, Flour and Cereals sector as distributed among the various processing and end-product sectors of agribusiness and the national economy in 1961, we next consider the vertical column of this sector and trace through the purchases. Continuing the use of Feed, Flour and Cereals as an example (following column 5 from top to bottom) we note that this sector purchased \$236,100,000 from the Agriculture sector (row 1); no goods or services from the Forestry Products (row 2), Fish and Fur (row 3), and Metal Ore and Concentrate (row 4) sectors; \$1,100,000 from the Non-Metal Minerals sector (row 5); \$300,000 from the Coal Sector (row 6); \$100,000 from the Oil and Natural Gas sector (row 7); \$15,500,000 from the Meat Products sector (row 8); \$1,400,000 from the Dairy Products sector (row 9); and \$400,000 from the Fruit and Vegetable Products sector (row 10). Column 5, row 11 relates to the same transfer of goods within the Feed, Flour, and Cereal sector mentioned earlier; however, when read down the column the transfer shows up as a purchase of \$38,200,000 of supplies rather than as a sale. Similarly, following down column 5 from rows 12 through 65, the purchases (inputs) by the Feed, Flour, and Cereal sector from the respective sectors of the processing or intermediate industries may be ascertained. The remaining rows (66-73) represent factor payments made by the purchasing columns. Factor payments consist of cost items not included in the transactions of the processing sectors and need not concern us here. Reading down column 5, row 75 shows the total outlays of this purchasing column. As mentioned earlier, the total outlays, or inputs (row 75, column 5), do not match exactly the total outputs (row 11, column 27) because the rows are expressed as commodities rather than industries. For our purposes we shall treat the commodities as if they were industries as the discrepancies in balancing in each sector are not sufficient to affect our illustrative use of the data.

Through interindustry analysis it is possible to determine the direct and indirect requirements from various sectors per dollar of final demand from any one particular sector. Such analysis takes into account the interdependence amongst the productive units of an economy and, therefore, can be applied to analysis of the economic structure, formulation of programs of action, and prediction of future events. Interindustry techniques are useful for both structural analysis and policy guidance but so far have been only of limited value for prediction.

³ Re-exports are imports that are subsequently exported, for example, auto parts that are imported to be incorporated in finished autos.

⁴ Other Final Demand is made up of consumer purchases, government purchases, and capital formation. For the agribusiness industries we are examining, Other Final Demand is almost completely consumer purchases as the government expenditure and capital formation components are negligible.

THE AGRIBUSINESS FLOW CHART FOR 1961

The Agribusiness Flow Chart for 1961 (Table 4 in this chapter) illustrates in graphic form the most important data contained in the Input-Output Chart, Exhibit 1. In the flow chart one can trace the major farm supplies items as they were utilized in farm production, and the movement of the resulting farm commodities through successive stages of processing and distribution. The pattern of this specific flow chart is but one of many that might be devised from basic matrix data to highlight different features of agribusiness or to amplify a specific segment of it.

The data for the Flow Chart, (Table 4), and for the Input-Output Chart, Exhibit 1, for the most part are the same and the source is the D.B.S. 65 industry by 65 commodity matrix for 1961. Table 4 is just one of many ways of presenting the data contained in Exhibit 1 to show the interrelationships and intrarelationships that exist within agribusiness and between agribusiness and the rest of the economy. The main purpose of the Flow Chart is to give some general over-all dimensions of agribusiness as it existed in 1961, using the best data and estimates available. This is not a complete or an exact picture of agribusiness, yet it does present a general outline of that part of the economy we refer to when using the term "agribusiness."⁵

The derivation of the Flow Chart from the Input-Output Chart is outlined in Appendix B.

From examination of the Agribusiness Flow Chart, we see that there are 9 industries supplying major inputs to agriculture. The principal one, machinery and motive power, is the subject of a Royal Commission whose final report is expected late in 1969. For many of the industries such as chemicals, trade, petroleum products, finance, and transportation, their outputs to agriculture are a relatively small part of their total outputs.

On the output side of the agriculture sector, the food, alcoholic beverages, and tobacco products industries represent the principal domestic markets in the processing-distribution sector for the products of the agriculture sector.

⁵ Davis and Goldberg, *A Concept of Agribusiness*, pp. 29-31.

APPENDIX B

RECONCILIATION OF THE AGRIBUSINESS FLOW CHART (TABLE 4) WITH THE AGRIBUSINESS INPUT-OUTPUT MATRIX (EXHIBIT 1)

Exhibit 2—Flow Chart

Agriculture Purchases

1. Agriculture purchased \$64.2 million from Seed Supplies.....
2. Agriculture purchased \$289.0 million from Feed Manufacturers.....
3. Agriculture purchased \$347.1 million from Farm Machinery and Motive Power Manufacturers.....
4. Agriculture purchased \$154.1 million from Petroleum Products Manufacturers.....
5. Agriculture purchased \$76.1 million from Fertilizer Manufacturers.....
6. Agriculture purchased \$28.3 million from Agricultural Chemical Manufacturers.....
7. Agriculture purchased \$105.6 million from Wholesale and Retail Trade.....
8. Agriculture purchased \$94.3 million from Finance, Insurance, and Real Estate.....
9. Agriculture purchased \$102.0 million from Transportation, Storage and Utilities.....

Intermediate Activities

10. Food Industries purchased \$1,601.9 million from Agriculture.....
11. Alcoholic Beverages purchased \$29.9 million from Food Industries.....
12. Alcoholic Beverages purchased \$17.8 million from Agriculture.....
13. Tobacco Products purchased \$103.5 million from Agriculture.....
14. Agriculture exported \$803.1 million.....
15. Wholesale and Retail Trade purchased \$210.3 million from Agriculture.....
16. Hotels and Restaurants purchased \$52.4 million from Agriculture.....
17. Hotels and Restaurants purchased \$351.5 million from Food Industries.....
18. Leather Products purchased \$24.5 million from Food Industries.....
19. Pharmaceuticals, Soaps, Toiletries, and Other Chemicals purchased \$32.4 million from Food Industries..
20. Paint and Varnish purchased \$5.2 million from Food Industries.....

Exhibit 1—Source

Agriculture Purchases

1. D.B.S. estimate
2. D.B.S. estimate
3. D.B.S. estimate
4. Column 1, row 48
5. D.B.S. estimate
6. D.B.S. estimate
7. Column 1, row 55
8. Column 1, row 59
9. Column 1, row 56 plus column 1, row 58

10. Column 28, row 1
11. Column 10, row 27
12. Column 10, row 1
13. Column 11, row 1
14. Column 22, row 1
15. Column 18, row 1
16. Column 16, row 1
17. Column 16, row 77
18. Column 12, row 77
19. Column 14, row 77 plus column 15, row 77
20. Column 13, row 77

Intermediate Activities

- 21. Wholesale and Retail Trade purchased \$14.5 million from Food Industries.....
- 22. Food Industries exported \$341.0 million.....
- 23. Alcoholic Beverages exported \$88.6 million.....
- 24. Tobacco Products exported \$28.1 million.....

Other Final Demand
(effectively Consumer Purchases)

- 25. Non-processed foods \$486.2 million.....
- 26. Food Industries \$3,178.7 million.....
- 27. Alcoholic Beverages \$322.5 million.....
- 28. Tobacco Products \$231.8 million.....

Agriculture Purchases

- 21. Column 18, row 77
- 22. Column 22, row 77
- 23. Column 22, row 16
- 24. Column 22, row 17

Other Final Demand
(effectively Consumer Purchases)

- 25. Column 26, row 1
- 26. Column 26, row 77
- 27. Column 26, row 16
- 28. Column 26, row 17

chapter twelve

MARKETING BOARDS

INTRODUCTION

Marketing boards¹ were created partly because of producer dissatisfaction with prices and incomes and partly because of the wide disparity in numbers whereby large numbers of farmers must sell to small numbers of agribusiness firms. Early attempts to meet these problems took the form of marketing co-operatives. Although marketing co-operatives did many things successfully the fact that they could not make deductions from *all* producers nor bargain collectively for all producers nor manage the supply coming to market, led to the demand for farmer-controlled marketing boards with compulsory powers over all producers of a specified commodity.

Because of legal decisions concerning the constitution, all producer-controlled marketing boards are organized provincially. There are now about 120 such boards and they are involved in the sale of about one-quarter of the value of all farm products sold in Canada.

¹ In this chapter we have not included among marketing boards such federally-appointed bodies as the Canadian Wheat Board and the Canadian Dairy Commission. For the early history of marketing boards see:

Poetschke L. E. and Mackenzie W., *The Development of Producer Marketing Boards in Canada*, 1957.

See also: Hiscocks C. A. and Walker H. V., *A Report on Marketing Boards in Canada*, 1969, a study undertaken at the request of the Task Force. For experience specifically in Ontario, where marketing boards have been more prevalent than in other provinces, see

Perkin, G. F. *Marketing Milestones in Ontario 1935-1960*, Ontario Department of Agriculture and Food, 1961. For details of voting requirements, administration and relation to governments, see

A Comparative Study of Agricultural Marketing Legislation in Canada, Australia, United Kingdom and the United States, University of Guelph, 1964.

This chapter examines the effectiveness of various marketing board programs which have been tried or proposed. These include product promotion, improvement in marketing channels, two-price systems, collective bargaining, input quotas, and sales quotas. It then examines several crucial issues: the appropriate type of national marketing boards, relations of boards with governments, and the relations of boards with other sectors.

A Note on Supply Management

There is a great deal of confusion about what is meant by "supply management" and what types of programs could be regarded as programs of supply management. To avoid confusion we shall deal with this definitional problem at this point. Our definition is as follows: supply management refers to centralized control over the quantity and/or price of one or more commodities of specified quality coming from a specified group of producers to a particular market or markets in a given period. Given this broad definition, supply management may be brought about by four different types of programs:

- (a) two-price systems,
- (b) collective bargaining,
- (c) input quotas on the use of one or more inputs by individual farmers,
- (d) sales quotas on the amount of a commodity which may be sold by individual farmers.

These are dealt with separately below.

GOALS AND PROGRAMS

Although the techniques and organization used to achieve the goals of marketing boards differ considerably, the goals are identical. The primary objective of any producer-controlled board is to increase the net income of its members. Some boards may fail to achieve this goal either because of adverse economic odds or of mistaken or poorly executed programs. In error, some regard "higher net income" as equivalent to "higher prices" and attempt to maximize the wrong thing. Because of the problem of estimating costs, most boards regard gross income of producers as being a good proxy for net income. In many cases this comes down to trying to get the best possible price for whatever their members decide to produce in a given year.

It should be noted that the goal of higher income (net or gross) for members (i.e. producers of the commodity in the province or area specified) excludes producers of other commodities even in the same province and it excludes also producers of the same commodity in other provinces. This is as it should be, given the fact that boards are provincial in scope and commodity oriented. The Ontario Soybean Growers Marketing Board, merely to use an example, must have as its prime concern the income of those Ontario farmers who choose to produce soybeans. The Board might co-operate with the Winter Wheat Board to save administrative costs (as it does), and contract with United Co-operatives of Ontario for certain marketing services (as it does) and contribute as a member of the Ontario Federation of

Agriculture (as it does), and, if there were a similar board in Quebec or Saskatchewan it might co-operate with it—but all of these actions should be taken only if it appears that they are in the best interest of Ontario soybean growers. The Board might attempt to get higher tariffs on soybeans or soybean meal even though these might hurt Ontario hog producers; it might, quite logically given its objectives, underline the acceptability of Saskatchewan-produced rapeseed meal.

(a) *Product Promotion*

Some marketing boards have limited their activities to advertising and other methods of promoting their products: for example the Ontario Cream Producers Marketing Board was a purely promotional board during its many years of existence. Other marketing boards often undertake promotion but only as one of several programs. The Ontario Milk Marketing Board budgeted about \$2 million for promotion in 1968-1969. It is impossible to generalize about the value to producers of promotion expenditures, but, because farmers are so far from the point of retail sale, the case for promotion would have to be unusually strong before it could be recommended.

(b) *Improvement of Marketing Channels and Institutions*

The use of teletype installations in marketing hogs comes to mind at once as a system pioneered by a marketing board which has greatly improved price making and rationalized the marketing of the product. There have been other, less dramatic, improvements especially in transportation (eg. of fluid and industrial milk), in assembly, storage, and forwarding of cash grains, and in providing market information, advice and forecasts. The possibilities for producer benefit arising from these kinds of marketing board activities are great. Each product and each province, however, is unique and it is most undesirable to conclude that any one program is appropriate for all situations.

(c) *Two-Price² Systems*

Two-price systems operate when a seller receives a higher net price in one geographical market than another, or when he charges a higher price for his product when it is used in one form rather than another. The former is the system used by the Ontario Winter Wheat Producers Marketing Board when it sells into export markets at lower prices than in the domestic market.³ The latter is the system used by the Ontario Milk Marketing Board when milk used for fluid consumption is more highly priced than milk for industrial use.

Multiple pricing is quite common in non-farm fields. Industrialists sell products for a higher net price at home (behind a tariff) than abroad; a dentist charges a wealthy patient more than a poor one; a distributor sells the same physical product as a brand name high price product and also as a second line bargain counter product. All are examples of multiple pricing or "discriminating monopoly" as it is sometimes called.

² This is the commonly used term but "multi-price" is probably better.

³ Some boards disclaim any action of a two-price nature. For example, British Columbia Tree Fruits issued a formal statement at the Canadian Agricultural Congress of March 1969, denying their use of multi-pricing.

There is no doubt that multiple pricing can often produce greater revenue for the same quantity sold. Usually this involves a high price in the domestic market and a low price abroad where one must compete with the products of other countries. Unfortunately multi-pricing discriminates in favour of foreign consumers and against Canadian consumers but this is usually true for any product (farm or non-farm) when the multi-pricing is done by Canadians. When it is done by others we call it dumping. The last sentence is, unfortunately, only too true, and indicates the way in which attitudes are shaped by words. A "two-price system" sounds perfectly respectable; "acting as a discriminating monopolist" has questionable overtones, but "dumping" seems a rather despicable action, performed only by our competitors (usually foreign). Yet they all refer to the same act, and they all discriminate against consumers in nearby or home markets.

The Task Force can see no objection in principle to farmer marketing boards operating two-price systems especially when such pricing occurs also in other sectors of the Canadian economy. The only objection would seem to be when governments not only give central selling privileges to a board but also either ban imports or give that board the right to license (or refuse to license) imports. In other words, since there are no import quotas or licenses for the importation of soybeans, onions,⁴ winter wheat and white beans, then boards should be free in principle to operate multi-price systems if they wish. The Canadian Wheat Board does have licensing privileges over imports of wheat and coarse grains.

The possibility of successfully operating a two-price system between two geographically distinct markets depends upon keeping the two markets separate. Obviously, the spread in price between the two markets could not exceed the cost of transport and tariff from the low priced to the high priced market or the product would flow to the latter. In the case of a milk board which operates a multi-price system depending upon the form of utilization of the product, the pricing program would collapse were it not for the authority of the provincial government which enforces the multi-pricing system. The argument for a two-price system for hard spring wheat is strengthened by current practice in regard to milk. Bread and fluid milk are more or less equally basic to Canadian diets, poor families spend much higher proportions of their incomes on both bread and milk than do rich families. If a two-price system on bread is regressive⁵ which is the argument most frequently used against it, then so is price discrimination in milk sales since fluid milk prices exceed those of industrial milk of equal quality. A two-price system for wheat could work only because of federal government import licenses, but the two price system for milk *does* work only because of provincial government regulations. Seen in this light, it would appear illogical to support price discrimination for milk and deny it for wheat.

One of the most questionable forms of price discrimination is that of the Canadian Dairy Commission in maintaining the price of skim milk powder at 20 cents per pound to Canadians, while selling it to foreign consumers at six

⁴ The Ontario Onion Producers Marketing Board sold at top price in Ontario, lower in Quebec, and lowest abroad. A producer vote in 1969 was unfavourable to its continuing to market onions.

⁵ Falls proportionately more heavily on low income people.

to eight cents. This, of course, is true of all export subsidies and tariffs, and illustrates the far greater emphasis nations place on their citizens as producers rather than as consumers.

A two-price system involves some form of price pooling whereby those whose product is sold to the lower price market are not penalized. Because pooling is difficult to operate on a voluntary basis (since everyone would prefer to sell his product in the high price market) it usually involves the compulsory features of a marketing board.

(d) *Collective Bargaining*

To many people marketing boards represent the opportunity for collective bargaining which has done so much, apparently, for labour unions and trade associations. This is particularly appealing in an industry in which there are thousands of producers and only a few buyers. Some marketing boards bargain collectively with buyers concerning minimum prices and terms and conditions of sale (grades, discounts, permissible amounts of foreign material, time of payment and so forth). For example minimum prices of vegetables-for-processing in Ontario are established by collective bargaining well before the planting season begins; thereafter processing companies sign contracts with producers for specified numbers of acres to be devoted to a crop. Since it is very risky to produce such products without a contract, there is in effect, a form of supply management. Processors are able to contract in the way which they find most efficient or expedient—usually with the larger, more dependable growers. The number of acres contracted by each processor is well known and each probably takes not only the price but the acreage contracted by his competitors into account in deciding upon the total of his contracts. This procedure can bring greater stability and less risk to the producers of these commodities and higher quality to consumers.

There are two possible disadvantages to such collective bargaining. The first is a loss of efficiency. There is no way by which a new producer can break into this field of production except by persuading some processor to offer him a contract. It is illegal for him to offer to sell at less than the minimum negotiated price or to offer “kick-backs” of any kind. Furthermore, the minimum price to producers usually applies across the province regardless of farm production costs in different regions. The result is that production locations are determined by the processors exclusively on the basis of *their* harvesting, processing, and distribution costs. It is probably the case that, given their other alternatives for the use of land and labour, producers in lower income, lower land-value areas could afford to produce these commodities for lower prices than could those currently producing them. They cannot compete, however, by cutting prices because there is collective bargaining. Thus production may occur in the wrong areas, reducing efficiency and working against the competitiveness of the industry.

A second possible disadvantage is that the marketing board may insist on a price so high as to price local output out of the market, or, alternatively to make production so much more profitable than processing that processors move into the production phase. This has apparently been the case with several vegetables-for-processing in Ontario.

Collective bargaining may be involved in negotiating a one-price agreement, as in the case of Ontario vegetable-for-processing, or be a part of a multi-price system insofar as domestic prices are set by collective bargaining. Increasingly, however, it has been recognized that the bargaining power of marketing boards is limited unless they are able to control the supply of their products coming to market, as well as the supply of close substitutes. This has led to requests for marketing boards on a national scale.

(e) Input Quotas or Rights to Produce

Farm leaders have long recognized the importance of being able to control output or sales in order to increase the prices of farm products and the incomes of farmers. Early attempts to do so came through voluntary marketing co-operatives but these attempts were bound to be unsuccessful because they were voluntary; every producer had something to gain by remaining outside the organization and gaining the advantage of any higher prices which the program might produce.

The appeal of a program aimed at limiting output or sales ~~is~~ that it attempts to come to grips with the underlying problems of demand and supply whereas other programs such as price supports, input subsidies, marketing board sales promotion and so forth may be of limited benefit or great cost and do not affect the root problems of demand and supply conditions. The case for input or sales quotas is made usually on the grounds that the last two or five per cent of output is the critical amount, that it is in some sense "surplus"⁶, and if it could be eliminated, farm incomes would be much improved.

"Bargaining power", about which much has been written, is essentially dependent upon the ability to control supply.

Examples of input quotas are the acreage rights issued by the Ontario Flue-Cured Tobacco Growers Marketing Board, and broiler floor space rights by the British Columbia Broiler Growers Marketing Board. The delivery quotas of the Canadian Wheat Board are in a different but related category—different in that their purpose is to allocate scarce storage space among producers, similar in that quotas depend upon specified acreage per farm.

When the use of one input is restricted, thus reducing output and raising product prices, additional income accrues to the owners of the rights or quotas, the quotas acquire capital value, and the costs of production rise, both actual (for new producers) and calculated⁷ (for existing producer-owners). The gain accrues almost entirely to the quota owner, not to his tenant. The agency responsible for the supply management program must establish rules by which quotas may be transferred among producers and by which new quotas may be allocated, and by which the agency may acquire or eliminate quotas.

Economically, the rise in the price of the quotas or the input to which the rights are attached leads to more intensive use of other inputs, resulting in increasing costs. Thus high prices for tobacco land lead producers to use

⁶ That is, in excess of what can be sold at prices regarded by producers as satisfactory.

⁷ In the sense of "opportunity cost", if a quota could be sold for \$10,000 today, to hold it involves an annual cost of about \$800 since the \$10,000 could be invested at about 8 per cent.

more fertilizer and irrigation per acre, with higher costs, than would otherwise be the case. From the national point of view, resources are allocated inefficiently. From the point of view of an owner of land with tobacco rights, the program probably has the happy result of providing him with a tax-free capital gain.

(f) *Sales Quotas*

Fluid milk producers in many provinces have sales quotas or specified amounts which they can sell in certain markets. This technique has the advantage that it permits the lowest cost combination of land, labour, and capital to produce a given amount of output on any one farm and in this way is superior to the control of inputs. Its chief disadvantage for many products would be that output cannot be fully predicted, and thus producers may find unanticipated surpluses or deficits relative to their marketing quotas in any one production period. This problem can be largely overcome by allowing producers to exceed their quotas in one year, but subtracting the excess in that year from the quota of the following year, perhaps imposing a modest penalty. In the case of fluid milk, a secondary low price market is available.

ALLOCATION, TRANSFER, AND EXPANSION OF QUOTAS

For both input quota and sales quota programs, the quotas are held by individuals. Three vexatious problems arise concerning the initial allocation, the transfer, and the expansion of quotas. These are considered at this point.

The Initial Allocation of Quotas to Producers

There are three practical ways to allocate quotas initially: on the basis of production in a specified quota-setting period of the past, on the basis of present production capacity, and by auction. None of the techniques is ideal.

Basing the initial allocation of quotas on the *level of output or sales in a specified period* may be unfair to those who were investing in new facilities between the time that the quota setting period began and the time that the decision on the method of allocating quotas was announced. Others might be adversely affected by some temporary factors beyond their control, especially if the commodity is a crop and subject to unusual weather conditions. These problems can be overcome to some extent by some form of appeal system for those who feel themselves adversely affected by the program. More important is likely to be the lack of data on output or sales. Even with a product like eggs for which data are kept in order to calculate deficiency payments it is by no means clear that all sales have been recorded. For other products like beef, corn, and apples, it is unlikely that data would be reliable.

Basing the initial allocation of quotas on *present production capacity* has the appeal that asset-structure would bear some resemblance to initial quotas. This approach is probably more desirable for livestock and special crop facilities such as tobacco kilns than for most crops. There would remain some knotty problems of measurement and adequacy of facilities that would test even a Solomon. Adequate facilities unused for several years would be hard to classify and arbitrary decisions would abound.

Allocation by *auction* is probably the most open way, though this approach is unlikely to be popular among producers. Assuming that the quotas are valuable or will be valuable, why should they be given away? It is as logical and reasonable to have initial allocation determined by market prices as to have transfers determined in that way once the supply management program is underway. This argument would not apply, of course, in the case of fluid milk where quotas of various kinds have been in existence; nor, indeed, for any product with a quota system in operation. Revenues derived from quota sale might be held as a reserve by the agency for future use in market development, subsidized exports, research or administration. No one technique is likely to be entirely satisfactory even for one commodity. What is important, however, is to realize that quotas are possible only because of legislation and regulation by governments, that the money value of quotas represents windfall gains (unexpected and not worked for) and must be allocated with these two facts in mind.

Transfer of Quotas

There must be some mechanism by which quotas may be transferred among producers. The agency must record and sanction all transfers. There are several possible techniques:

- (a) Rights attached to specific real estate. In this case the only way in which a producer can gain new or additional rights is to purchase a farm with rights or quotas whether or not the farm is likely to be an efficient part of the producer's enterprise. This is an inefficient system for transferring rights or quotas and results in fixed location of output geographically.
- (b) Freely saleable or transferable. Varying prices would be established by demand and supply. Some geographical or other basis of regulating transfers might be imposed (for example, preventing the transfer of tobacco rights to those who have no suitable land or, in the case of marketing quotas such as for fluid milk, to those in remote geographical areas).
- (c) Rights purchased and re-sold by the supply management agency. Prices might be set arbitrarily by the agency or established by auction; rights must be separate from real estate. This is a variation of (b).
- (d) Rights surrendered to and allocated by the supply management agency. Rights would be of use only and not of property but would have scarcity value. This technique lacks satisfactory and acceptable criteria and would lead to suspicions of favouritism and worse.

In Ontario, fluid milk quotas prior to 1967 were transferred as described in (a); since 1967 they are transferred according to (b); the Hop Marketing Board in the United Kingdom followed the procedure indicated by (c). Rights to produce and sell flue-cured tobacco are as in (a); rights for broiler production in several provinces are as in (b). Economically, there can be no doubt that (b) is preferable to (a) and, politically, that (d) is most undesirable.

Expansion of Rights

The previous section dealt with the transfer of existing quotas or rights; in addition, as markets expand new rights must be created. These may merely be allocated to existing owners of rights on a pro rata basis, or allocated arbitrarily, or auctioned by the agency. The first technique has serious limitations for some products. For example, to add three to four per cent to a broiler grower's rights would imply an expansion in production of perhaps 1,000 to 2,000 birds per year; economic expansion would involve a new broiler house with 10,000 or more birds per year. The second technique—arbitrary allocation by the agency—is fraught with political difficulties. Only the third technique—auction of additional rights—can be justified economically and politically. The agency would receive the revenues and either pro rate them back to existing rights holders, or use them for research, market development, or other purposes.

INTERPROVINCIAL FLOW OF GOODS

Provincial marketing boards often have found the effectiveness of their programs undermined by increased production and lower prices in other provinces. This has been especially true for programs of collective bargaining, two-price systems, and input or sales quotas if production can occur in other provinces. At such times, farm leaders often seek some restrictions on the inflow of goods from other provinces or advocate the formation of national marketing boards.

Provincial governments have occasionally restricted the flow of goods interprovincially by the use of "health" and "sanitation" standards and inspection. For example if Province B insists that milk sold in the province must be produced on farms which are inspected by Province B's inspectors, and these do not visit farms in Province A, then there can be no interprovincial movement from A to B. Similarly if a province insists that eggs must be inspected and check graded by its own employees, perhaps to slightly different specifications from other provinces, then that province can so harass importers that interprovincial trade is reduced. Actions like these are not common, fortunately, but have occurred in spite of the fact that interprovincial and international trade are constitutionally under federal jurisdictions.

The Task Force wishes to take a strong position in opposition to these types of restrictions. They invite retaliation and could produce a measure of economic Balkanization that would be totally undesirable.

NATIONAL MARKETING BOARDS

Producers of many farm commodities look to the experience of provincial fluid milk boards and to the Ontario tobacco board in which high prices have resulted from production or sales quotas. Other provincial boards have had some success in raising or stabilizing prices to their members but in a number of cases have encountered difficulties arising from the inflow of similar commodities produced in provinces in which there are no similar programs.

Leaders of such boards, and other farm leaders, now look to national marketing boards to accomplish what they have found themselves unable to do in their own provinces only. Thus the desire for supply management, designed to affect farm prices and incomes, has become closely linked with a desire for national marketing boards. The two are not inseparable however, for national marketing boards might have other programs, such as sales promotion or improvement in selling techniques which are different from the various forms of supply management.

Different national boards might be of various structures and types just as provincial boards are. To be effective, powers would have to be delegated by both federal and provincial governments, however, and power that is delegated can always be withdrawn if one or more provinces feel that the arrangements are not in their interest. There appear to be three possible types of national marketing boards.

1. *National Agency of Provincial Boards*

One possible kind of national marketing board is a national producer-controlled agency created by provincial marketing boards. The Government of Canada might give this national board the authority to regulate interprovincial trade and exports (but not imports).⁸ Such a national board might co-ordinate provincial programs, operate national two-price systems and collective bargaining in addition to attempting to control output. In the latter case, the national body would set output quotas; the provinces (either the appropriate marketing boards or the provincial governments or both) would have to agree to a distribution among them of the total national quota. Each provincial producer-controlled board would allocate its provincial quota using whatever technique it liked for initial allocation, transfer and expansion of quotas by individual producers. The original division of national quota among the provinces would be set by negotiation, probably using some combination of present provincial consumption, capacity, and production as criteria. A formula might be devised to share expansion in each provincial market, perhaps according to growth in population or to give greater self-sufficiency provincially.

Economically, this system is likely to be a disaster, Balkanizing the economy into ten sub-economies and preventing the shift of production to those areas in which it can be carried out most cheaply and most profitably. If Province A were granted ten per cent of national output in the original allocation, it is most unlikely ever to agree to nine or eight per cent even though it loses all existing production advantages. Canadian productive efficiency would be seriously affected and in a few years one might expect to see increased low cost imports and then demands for higher tariffs and for import quotas.

⁸ Under the Agricultural Products Marketing Act the Federal Government now delegates to provincial marketing boards the power to control products produced within the province and moving into interprovincial and international trade. The constitutional issues of delegation to a national agency or of re-delegation by provincial boards to a national board, and the position of provinces which have no provincial board for a given commodity, are not clear.

This type of organization has the appeal of embracing existing producer boards and of bringing provincial departments of agriculture into the operation. There would be problems of protracted negotiations and possibly stalemate, given 11 governments and a number of provincial producer boards. Decisions of the national board would tend to reflect uneasy compromises under the ever-present threat that a provincial group might withdraw. These problems are likely to be much less severe for two-price and other programs than for those which involve quotas. Supervision and enforcement of provincial quota limitations could give rise to suspicions; one has only to imagine what would have been its problems if the Canadian Wheat Board had been operated as a federal-provincial scheme with provincial boards responsible for administration of delivery quotas and storage within their boundaries.

2. Federally-Appointed Commission like the Canadian Wheat Board

Such a board would receive its primary powers and its structure from the Federal government but provincial government would have to delegate to it some of their powers relating to intraprovincial trade (within one province). Once again, the necessity for delegation of powers from different governments means uneasy compromise at best. Such a commission would, however, be able to control inter-provincial and export sales without depending upon provincially delegated powers. It could operate two-price systems and storage programs. If it attempted to control output it could do so by operating a nation-wide system of negotiable sales quotas, preferably facilitating exchange of quotas through a central brokerage.

Such a system may not be politically acceptable either to provincial governments or to any existing provincial marketing boards. The Canadian Wheat Board, so sacrosanct in the eyes of some prairie grain growers for the past 25 years, is in existence because of the unique developments of the 1930's, and being here, is unchallenged. To create somewhat similar bodies at present might be politically impossible.

3. National Producer-Controlled Boards

A third type of national marketing board might be the national equivalent of one of the present provincial producer-controlled boards. It could resemble the Canadian Wheat Board in its powers and operation, except that its directors would be elected by producers rather than appointed by government.⁹ Such a national board would have to obtain its powers and report to some form of government appointed National Agricultural Marketing Board similar to the government-appointed boards which now administer the provincial marketing board legislation. The constitutional position concerning this type of national board is not entirely clear. The old Natural Products Marketing Act of the Federal Government which made somewhat similar boards possible in 1934 was declared ultra vires in 1937. However there has been considerable constitutional evolution since that time and the constitutional position is not completely clear.

⁹ Other alternatives are possible of course; some might be elected and some appointed, or some might be producers and others might be dealers, processors and consumers.

The major weakness of this type of body, as with the federally-appointed Commission, is political. In the case of provincial marketing boards, no province has been willing to delegate authority to producer boards without retaining the power to review and supervise through a provincially-appointed Farm Products Marketing Board. Similarly there would have to be a National Agricultural Marketing Board appointed by the federal government to delegate powers to and review the operations of national producer-controlled boards. Thus the national commodity marketing boards would stand in the same relation to the Federal government and its National Agricultural Marketing Board as provincial producer boards currently do to a provincial government and its Farm Marketing Board. The legislatures delegating power to marketing boards have a responsibility to consumers, processors, retailers and others as well as to producers of other farm commodities who may want to produce the one in question.¹⁰ Government attitudes and responsibilities toward these other interests and toward the "national interest" are not likely to be greatly different whether the producer-controller boards are federal or provincial as at present.

The major political problem is that the National Agricultural Marketing Board would have to be responsible to the Federal government, since it cannot be responsible to 11 legislatures. It is true that the Government of Canada could attempt to create advisory councils (see Chapter 11) and to consult the provincial departments of agriculture, but ultimate authority would rest with the Federal government. This was not opposed in the case of the Canadian Wheat Board, nor of the Canadian Dairy Commission, though the first was introduced in times of emergency and the second to assist the dairy industry and did not offer any threat to the continuation of existing provincial milk marketing boards.

In summary, political and constitutional problems will make it difficult to create effective national marketing boards. There are 120 provincial producer-controlled boards; vested interests have been created, both personal and organizational. Provincial departments of agriculture have a long involvement in marketing board legislation and operation and they would be reluctant to jeopardize the work of the past and turn over much of their role to the senior level of government. There is political appeal in the work done and there are personal vested interests.

Assuming that these political and constitutional problems can be solved, the most desirable form of organization seems to be a National Marketing Board delegating power to national commodity boards (Number 3 above) and to Commissions such as the Canadian Wheat Board. There seems no good reason why all commodity boards should be formed in the same way any more than there are any good reasons why they should have identical programs. Thus there could be a National Agricultural Marketing Board which might create a Product A Marketing Commission and appoint its commissioners, and create also a Product B national marketing board, all of

¹⁰ To give a specific example, the Ontario Farm Products Marketing Board has a responsibility to the thousands of Ontario farmers who would like to produce tobacco as well as to the 4,500 farmers who have acreage rights and who determine the policy in the Ontario Flue-cured Tobacco Growers Marketing Board.

whose directors would be elected by producers, and create a Product C national marketing board whose members would be provincial producer marketing boards.¹¹

The important thing is that the N.A.M. Board should be in a position to act in the "national interest" in determining which powers should be delegated to the commodity boards, and in reviewing the programs of the commodity boards and withdrawing powers if necessary.

RELATIONS OF BOARDS AND GOVERNMENTS

All producer-controlled boards are creatures of provincial governments, and depend not only for their powers but for their very existence upon the government of their province. In a certain respect, of course, the same is true of a corporation or co-operative incorporated under provincial legislation, but a government never feels any necessity to hold a plebiscite as to whether the corporations will continue or not as it does with marketing boards.

As discussed earlier in this chapter, marketing boards exist to act in the best interest of their members just as labour unions and trade associations do. Governments, however, have a responsibility to all members of a province or country and not just to one segment. Furthermore, their responsibility extends through time, not only to the present members but to future members. Thus it would be wrong to expect governments to turn over for any long period to any group those mandatory powers which belong uniquely to government. This is especially true in regard to limitation of imports, which the Task Force feels, should not be delegated to any producer board. The most that could be expected would be the temporary granting of various powers subject to constant or periodic review, and subject to withdrawal. This is the present situation for provincial boards.

What has been a source of weakness has been the tendency to underman and overwork the small staffs of the provincially appointed boards responsible for the administration of marketing boards legislation. If a National Agricultural Marketing Board were formed to be responsible for the creation and operations of single commodity boards, the Federal government must be prepared to provide sufficient funds to allow the National Board to hire staff and support research on the appropriate scale.

RELATIONS WITH OTHER SECTORS

(a) *Relations with Agribusiness*

Farmers who produce a commodity are only one of a number of groups in a process which eventually satisfies consumer wants. Others who contribute to this process, and who also make their income out of it, are those who assemble, transport, finance, process, package, store, and retail the product. Farmers and these other groups have some interests in common and some in conflict. To be able to sell a larger quantity at higher prices is of common interest but if this comes about only through advertising expenditures that

¹¹ This alternative is unlikely because of the small number of products for which there are provincial boards in the important producing provinces.

reduce producer prices, then there is a conflict of interest. In recent years there has been a very desirable recognition that there were substantial areas of joint interest. The creation of marketing commissions with industry-wide representation rather than exclusively producer membership has resulted from greater appreciation of the existence of areas of joint interest. This development has been pioneered in Ontario, as has the development of advisory or industry committees consisting of representatives from agribusiness sectors along with marketing board representatives. The development of such a commission warrants some description at this point.

The Ontario Apple Marketing Commission was created in 1968 under the Farm Products Marketing Act¹² following a favourable vote of producers (other sectors did not have a vote.)

There are 23 directors of the Commission: 12 producers are elected by producers, five dealers by the dealers association, four processors by the processors association, and one retailer and one consumer appointed by the Ontario Farm Products Marketing Board.¹³

The Commission has the right to establish prices at or between the farm and retail levels; in fact it does so only for the retail level, with three geographic zones, and for apples sold for juice. This recent development is an important innovation that should be watched very closely; it represents a possible whole new direction for many marketing boards.

(b) Relations with marketing co-operatives

Certain marketing board programs result in conflict with co-operatives. One such program was the teletype system of selling hogs; in Ontario the board made concessions to allow the now-defunct co-operative to continue to handle members' hogs; in Manitoba the teletype system was not made compulsory for a similar reason. No criticism of these decisions is intended; the fact that these bodies were able to resolve their differences is to their credit. The main point we wish to make here is that if marketing board activities are expanded, it is likely that there will be increasing conflicts.

There are examples, too, of mutual co-operation. The Grain Division of United Co-operatives of Ontario has acted as the agent of the Ontario boards marketing soybeans and winter wheat. Unfortunately it appears that the areas of mutual benefit seem to be fewer than those of potential conflict.

(c) Relations with other boards

What should be the relationship of one marketing board with another? With the present structure whereby provincial producer-controlled boards receive authority from their provincial government for marketing their commodity, the "self centredness" of boards is inevitable. Nevertheless the actions of one board may have important and fairly direct repercussions on other boards and their members.

¹² This is the Act under which the 20 producer-controlled provincial marketing boards operate. The Act was revised in 1968 to accommodate the structure of an industry-wide commission rather than a producer-only marketing board. The amendment applies only to apples. The Ontario Farm Products Marketing Board administers the Act i.e. it delegates power and reviews programs of the commodity boards and the new apple commission.

¹³ There seems to be no appropriate provincial retailers association.

Resources shift fairly readily from the production of one farm good to another. Thus if a board were to be successful in raising prices, not only would there be a tendency for producers of the same product in other provinces to increase output, but there would be a tendency for producers of other commodities in the same province to turn to the production of this commodity. Alternatively, if prices of product A have been increased by restricting output or marketings, the resources which can no longer produce A turn to producing B and the price of B will fall. The result of these actions is that gross and net farm incomes from all output might as easily be reduced as increased if the only criteria for marketing boards' actions were, as they presently are, administrative ease and producer pressure.

To restrict output of hogs might increase gross income from hogs if the supply management were properly operated but the resources released might then go to produce additional eggs or milk and the total income from hogs, milk and eggs might either fall or rise. The result is hard to predict. One can predict with confidence that if corn production were reduced by quotas there would be an increase in winter wheat production and gross income from corn and winter wheat combined would fall.¹⁴ The effectiveness of these actions would increase with the advent of national boards.

It is reasonable to expect that the present restrictions on tobacco production force resources into the production of sweet corn and vegetables for which the extra value of output may be less than for tobacco; if so, aggregate gross incomes will be reduced. In the first year of controlled broiler production in Ontario, the output of turkeys increased dramatically as producers shifted resources to that product. The disappointing turkey prices which followed must have offset most of the higher prices experienced by broiler growers.

The question must be posed clearly and answered clearly. Is it desirable to have one general farm organization with (subsidiary) national and provincial marketing boards, managing supply (whenever feasible) in the interest of total farm income? Alternatively is it more desirable to have the present largely fragmented organizations—in some cases with national rather than provincial boards—in which each body does its best for its own members?

If one were to answer "yes" to the first question then the whole structure of institutions and criteria would have to be radically changed. This is not a matter of the desirability or necessity of *national* marketing boards as opposed to provincial boards, but of a national supply management agency which would encompass practically all of agriculture. Commodity marketing boards, whether national or provincial, might prove a political hindrance to rational supply management in the interest of *all* farmers and *total* farm income.

Such an organization would have to be huge, undertaking research, employing inspectors, and making decisions far beyond the scope of anything we have seen in agriculture to this time. As supply management proceeded

¹⁴ Since almost unlimited supplies of American corn are available without affecting import prices, corn prices in Canada would remain almost constant. Increased output of winter wheat would lower the average price.

from one product to another, resources would tend to be pushed into the production of those products for which there were no quotas (and of course some producers would rush into production to create a base on which future initial quotas might be established), prices would fall and producers of those commodities would demand supply management for *their* products too.

The Task Force takes a position on these two questions, answering "no" to the first and "yes" to the second. In other words, the Task Force feels that the dangers inherent in a huge centralized farmer organization in Canada's widely dispersed and dissimilar farm sector are so great as to outweigh all likely advantages.

Although the Task Force has opted against one huge national farm organization exercising supply management powers over most farm products this does not mean that the Task Force favours extreme fragmentation. It would appear undesirable to have a Wheat Board, a Barley Board and an Oat Board in place of the Canadian Wheat Board. The present situation in Ontario, for example, whereby the Tender Fruit Growers Marketing Board sells peaches, pears, plums and cherries for processing, the Fresh Fruit Growers Marketing Board sells them for fresh consumption and the Grapes-for-Processing Board and the Fresh Grape Board sell grapes for separate uses, seems to represent duplication of effort, especially since most of the growers are in the Niagara Peninsula. This kind of fragmentation is undesirable and unnecessary.

It is essential that the use by marketing boards, national and provincial, of powers delegated to them by federal and provincial governments should be carefully and continually scrutinized by the governments granting the powers. The provincially-appointed Farm Products Marketing Boards have not been greatly concerned about the interrelations of producer boards, each one of which has operated in what it regards as the best interests of only the producers of that commodity. This is quite reasonable on the part of the producer boards since they were created under government legislation to work in the interests of existing producers of the commodity concerned. It may be claimed that the government-appointed Farm Marketing Boards have operated reasonably in that whether or not producer boards are created is a decision of the producers themselves and if the actions of some boards hurt the producers of commodities for which there are no boards, it is up to the latter to petition, vote, and create a board of their own. This is not an adequate argument.

Producer controlled boards naturally operate in what they regard as the best interests of the present producers of a commodity, not necessarily identical with the interests of producers of other commodities, would-be producers of the regulated commodity, or the national interest. As George Mehren once said about marketing boards:

It is not society which should be protected from the use of monopoly in agriculture. It is agriculture which should be protected from its abuse.¹⁵

¹⁵ G. L. Mehren "Some Economic Aspects of Agricultural Control", *Journal of Farm Economics*, Vol. XXX, No. 1, p. 42.

STABILITY OF INCOME AND OUTPUT

Early in this Chapter we accepted the objective of increasing members' income as the primary goal of marketing boards. An important but secondary goal is that of stabilizing income and output.

Marketing board programs which bring greater stability to production, prices, and income will make for more rapid adoption of technological change, less overcapacity at the farm and processing levels, better opportunities for forward planning, sounder bases for credit, all of which contribute to more efficient and low cost operations. Consumers and the economy generally would also benefit from increased stability in the agricultural sector. It is probable that the prospects of increased stability would accelerate the "sorting out" process among farmers, making it possible for the more aggressive and more specialized to take over more of the market from smaller, less specialized producers.

The various forms of supply management—two-price systems, collective bargaining, input rights, and sales quotas—can all contribute to greater stability if used properly.

CONCLUSIONS

1. The main objective of both provincial and national marketing boards should be to increase the incomes of their members as much as possible. A second objective is to stabilize incomes and output.

2. Single-commodity provincial boards have achieved a fair amount of success through a variety of programs. No one type of program is most desirable in all circumstances.

3. If output or sales of a commodity are to be controlled, a national approach is necessary except in the case of a small number of products locally produced (e.g.—tobacco in Ontario). If one or more provinces which are important producers of a commodity do not participate in such controls, the remaining provinces cannot be successful in controlling output or sales.

Unless imports are controlled, there are serious limitations on what can be accomplished through supply management. To control imports, however, would jeopardize our trading arrangements with other nations. Given our heavy dependence on international markets for exports, including agricultural products, this must be ruled out.

4. It is dangerous to advocate a program of supply control without being specific about the kind of administration, the techniques of control and the initial allocation and transfer of quotas which must be an integral part of such a program. Questions such as the inter-provincial allocation of quotas, transferability of quotas among producers, and many other comparable considerations dealt with in detail in the main body of his Report have a profound bearing on the success or otherwise of such a program.

5. Output control through input rights or sales quotas can raise the incomes of producers of a commodity but sometimes at the expense of the incomes of producers of other commodities into which production resources

tend to flow from the controlled commodity. The governments which give such powers to commodity marketing boards must take ultimate responsibility for the ways in which those powers are used and must consider their possible effects on other producers and other sectors.

6. Supply management of the all-pervasive type which would make it possible to allocate resources rationally would have to include most farm products, would involve inspection, research, administration and control far exceeding anything experienced in Canadian agriculture to date.

7. It is clear that supply management has a useful role to play in the stabilization of incomes, prices and output. If the objective is to stabilize incomes rather than to raise them by restricting output then supply management can operate successfully for one commodity.

8. The current attention being devoted to marketing boards and supply management has very desirably focussed attention on markets and marketing whereas the tendency in the past has been for preoccupation with production problems.

9. There are many useful functions which provincial and national marketing boards can perform in addition to attempting to manage supply. These include market promotion and research, improvement in marketing techniques such as the teletype system of selling hogs, fuller exploitation of different markets through product and price differentiation, dissemination of market information.

10. The growing responsibilities of provincial and possibly national marketing boards make it imperative that the government-appointed supervisory marketing boards be better staffed to evaluate producer proposals. This is particularly important because of the complex and far reaching ramifications of any given commodity marketing board on other sectors of the economy as well as on producers of other farm commodities.

RECOMMENDATIONS

1. Legislation should be introduced by the Federal government to permit the creation of national commodity marketing boards. The Task Force recommends that this legislation include:

- (a) A National Agricultural Marketing Board, responsible to the Federal cabinet¹⁶ and operating so as to benefit agriculture without serious adverse effects on the national economy.
- (b) Appointments to the N.A.M. Board should be made by the Federal government and should be drawn from several walks of life.
- (c) The N.A.M.B. should delegate powers and responsibilities to commodity marketing boards, scrutinize carefully the way in which these powers are used, and withdraw them when the "national interest" dictates.

¹⁶ The N. A. M. Board would bear the same relationship to the Federal government as, for example, the Ontario Farm Products Marketing Board bears to the Ontario Government.

- (d) National commodity marketing boards may be of various structures and composition: some may be federations of provincial boards, some may be producer-controlled without provincial equivalents and some may be federally-appointed commissions.

It is important that the legislation permit the creation of commodity commissions similar in structure to the Ontario Apple Marketing Commission, with membership drawn from all groups who have a stake in the decisions to be made. No common kind of structure appears necessary.

2. The N.A.M.B. would require very substantial sums in order to undertake the appropriate research and reviews implied by its areas of responsibility.

3. If the N.A.M.B. permits any subsidiary commodity marketing board to impose quotas on inputs or sales, it should ensure that the method of doing so would freely permit the relocation of production in the lowest cost areas of the country. This virtually rules out the establishment of provincial quotas, but not of nationally negotiable quotas. Similarly the N.A.M.B. should prevent any barriers being raised against the holding of quotas by the lowest cost producers within an area.

4. Since the commodity marketing boards may be expected to make proposals and to work in the best interests of their own members, it should be the responsibility of N.A.M. Board to take into account the interests of other sectors of the economy including those potential producers (who are not now producers) of the commodity in question.

5. The power to control imports should not be given to N.A.M.B. nor to any national commodity board.

6. There should be no attempt made to create one huge national all-encompassing body with widespread controls on output.

7. Provincial governments should continue to resist the temptation to introduce grading and quality regulations aimed at reducing interprovincial trade.

THE CAPITAL VALUE OF QUOTAS

The question of appreciation in the value of certain factors of production is much misunderstood. Perhaps an example may indicate the causes and effects of such appreciation. If the price of a farm product rises, farmers naturally try to increase their output of that product; in the case of crops they buy additional fertilizer, pesticides and herbicides, and buy better farm machinery. Almost all of these can be bought in increased total quantities without driving their prices higher. Land, however, is in more fixed supply than other inputs and consequently much of the higher income (arising from the higher price of the commodity) is reflected in higher land values. If unlimited supplies of land could be converted from other uses to the production of the higher priced commodity, land values would increase very little.

It is developments such as these which explain the ten per cent per year increase in prairie farm land values from 1962 to 1966. Improved market prospects and larger deliveries not only improved grain producers' incomes during this period but optimistic statements such as "there are markets for all the wheat that farmers can produce" provided the expectation that the higher farm incomes would persist. At some point too, speculation becomes a factor; if one expects land prices to increase by ten per cent this year as they did last year, why not buy now even if the price seems higher than is justified by potential incomes. From the sellers' side, why sell now unless one can obtain a price that is a good deal higher than one might have expected to receive a few months ago?

There is also, it is true, a tendency for land values to be increased due to technological change which generally results in lower average cost of production with increased size of acreage. By adding a small nearby farm to his existing acreage and with limited additional equipment and labour, an above-average farmer can increase his income considerably, and thus is willing to pay more for the extra farm than it would be worth to a farmer who planned to operate it as his only enterprise. This tendency is ever-present but it may be more than offset by a decline in optimism (as on the prairies at present) resulting both from reduced prices or sales and from a reversal in speculator's opinions.

Acreage rights or quotas such as those operated by the Ontario tobacco board make the supply of tobacco land completely inflexible. Thus tremendous appreciation of land values has occurred, since rights are attached to specific farms. Land with rights is now worth 8 to 12 times as much as equivalent land without rights.

If quotas are not connected with real estate, as with fluid milk quotas in several provinces, they become the factor of production which is in fixed supply, whereas the purchased inputs and to a lesser extent, land are readily available. The income earning capacity tends to be capitalized then into the factor in fixed supply—in this case the quotas. Uncertainty concerning future quota and price policies tend to reduce their market value from that which should prevail by rational economic calculations if there were no risk. In

Ontario, fluid milk quotas that sold for \$6-\$9 per pound in March 1969 and were worth two or three times as much were it not for the risk and uncertainty element sold for \$15 in September 1969. In British Columbia, quotas sell for \$25 or more per pound.

The capitalization of income earning capacity into quota values obviously affects costs just as higher land values affect costs. For a new buyer they represent an important cost; for an existing owner of quotas their present value represents what economists call "opportunity cost"—i.e. the possibility of income if they were sold today and the proceeds invested in the most profitable way possible. The capital value of quotas may have an important dynamic effect arising out of this opportunity cost concept. To a low income producer they represent the possibility of being paid a lump sum for leaving an industry. Thus dynamic change may be encouraged and the number of producers reduced even more rapidly than would otherwise be the case.

The question of international competitiveness and the effect of the capital value of quotas on it is another difficult question. How would one measure our competitiveness in producing a commodity such as wheat? The immediate answer is by comparing the prices of Canadian wheats in Liverpool, Rotterdam and Tokyo with American and other wheats of similar grade, both without subsidy (except for input subsidies such as research, extension, credit, and possibly transportation). Suppose then our prices are higher and we cannot sell; stocks accumulate and prices fall. As prices fall land values fall and costs fall. In a very real sense we remain competitive until lower prices force resources into the production of some more profitable alternative.

Ontario tobacco sells for 60 to 70 cents per pound, yet tobacco growers would not convert their resources to the next best alternative until prices fell to 30 to 35 cents per pound. According to the definition of competitiveness we would remain competitive right down to 30 to 35 cents. In the process the market value of land with rights would collapse and land with rights would be priced at about the same as land without rights. As prices of tobacco fall, the value of rights falls, and costs fall; and as prices of tobacco rise, the value of rights rises, and costs rise.

Quotas or rights are important in this picture in two ways:

1. they may result in built-in inefficiencies and higher unit costs of production as with the present Ontario tobacco rights,
2. because they are almost completely fixed in supply, their prices reflect almost entirely the changes in profitability and prospects in the industry. Fortunes, tax free, can be made in quotas as easily as in land if quota programs are not carefully formulated.

chapter thirteen

CREDIT

INTRODUCTION

About this chapter: There is no doubt that the subject of farm credit is important—proof lies in the fact that almost all provincial governments and half-a-dozen agencies of the Federal Government are involved in it. Obviously, credit demands attention from the Task Force. The reader may, however, appreciate a little guidance before reading this rather lengthy and detailed chapter.

- PART I *Credit and Farming*—Here is discussed the structure of Canadian farming, stressing the relationship of size and income with capital and credit.
- PART II *Credit Institutions*—These sections describe the many Federal and Provincial institutions devoted to farm credit.
- PART III *An Evaluation of Policies and Issues*—Does just what it says.
- PART IV *Four Alternatives in Providing Farm Mortgage Credit*—Presents four possible alternatives. One of these is that presented at the Canadian Agriculture Congress in March 1969 by the Task Force, this is given in greater detail in the Appendix.
- PART V *Recommendations*—Here the Task Force opts for one of the four alternatives, and for a joint Federal-provincial structure and other features designed to make farm credit an instrument of farm operation improvement.

PART I

CREDIT AND FARMING

While farming in Canada may still be classified as a small business when compared to large industrial corporations, the farm business has undergone substantial changes during the past quarter century. These changes have had a profound effect on the capital requirements of the farming industry and have influenced greatly the financial institutions which serve the farmers' growing need for credit. Indeed, all segments of the agricultural industry have been affected by the economic and technological changes which have taken place at the individual farm level.

The farm itself has been transformed from a relatively self-sustained enterprise where the farmer produced or made much of what he needed for his operations to a highly commercialized business closely linked to the cash economy. The modern commercial farm is highly mechanized, highly specialized and marked by a large capital investment in the business. The changes in farming have led, in turn, to the development of large industries designed to provide the farmer with credit facilities, chemical fertilizers, commercial feeds, machinery and equipment—a whole new complex of industries referred to as the agri-business sector of the economy. While the number of persons employed in the primary sector of agricultural production has been falling, the number employed in agri-business has been rising very substantially during recent years.

The trend to greater mechanization and the accompanying expansion in the size of business operations have led to a very significant increase in the amount of capital investment in the farm business. At the same time, the increasing use of off-farm resource inputs such as tractor fuel, fertilizer and herbicides have created the need for greater and greater amounts of cash operating capital.

During the period 1951-1967 the capital investment in Canadian farming increased from \$9.5 billion to \$21.2 billion while the cash operating and depreciation expenses increased from \$1.5 billion to \$3.2 billion. This increase in capital investment had the effect of increasing farm size and reducing the amount of labour required in agricultural production. Between 1951 and 1966, the number of farms dropped from 625,000 to 430,000 while the number of persons employed in agriculture declined from 940,000 to 560,000 persons.

A great number of different institutions are involved in extending credit to Canadian farmers at the present time. The Federal Government is involved in the farm credit business in various ways: through the Farm Credit Corporation which is under the jurisdiction of the Department of Agriculture; the Veterans' Land Administration under the Department of Veterans' Affairs; the Farm Improvements Loan Act administered by the Department of Finance; the Prairie Grain Advance Payments Act administered through the Canadian Wheat Board under the jurisdiction of the Department of Trade and Commerce; the Industrial Development Bank, a subsidiary of the Bank of Canada; the ARDA-FRED arrangements which provide for various types

of grants and for the purchase and sale of farmland. In addition to the various Federal Government agencies, all ten provincial governments are involved in one way or another in the farm credit field. Other institutions and organizations involved in farm credit include the commercial banks, credit unions, insurance, trust and loan companies, supply companies, dealers, stores, private individuals and finance companies. In general, many organizations are involved in the provision of credit to Canadian farmers.

Many questions may be raised with respect to the capital and credit needs of the Canadian agricultural industry. What are the capital requirements of an efficient farm business in various regions of Canada? How are these capital requirements to be met? Are the present lending institutions meeting the credit needs of Canadian farmers? What changes need to be made in existing credit policies? Are farmers equipped from a management point of view and are they willing to accept the type of credit policies which may be needed for their industry? Should and can the credit needs of agriculture be provided from the private lending institutions or will a greater degree of government involvement be warranted?

The answers to these questions depend on the type of structural adjustments which could occur in agriculture during the next few years. Credit policies which are appropriate for the development and preservation of the family farm are generally not suitable for an industry where a corporate form of organization predominates. If the farm industry should become organized along corporate lines, it is unlikely that its capital needs and methods of financing would be much different from that of other industries where the corporate form of organization prevails. As long as the family-farm type of organization survives, however, the need for special credit policies for farming is almost certain to continue.

The Task Force anticipates that the family-farm will continue to be the dominant form of production organization in agriculture during the next decade. It recognizes at the same time, however, that the very substantial adjustments which will occur during the next decade will place a severe strain on the family-operated type of business.

It may become impossible eventually for the individual farmer to accumulate sufficient savings during his lifetime to develop an efficient size of business and own a debt-free farm by the time of retirement. The growing management skills, the need for greater integration between production and marketing and the ability to withstand heavy risks may not be within the capacity of the family-operated farm business by the end of the century. A corporate form of farming with hired management and equity financing through the stock market may eventually evolve out of the far-reaching changes which are certain to occur in agriculture during the next two or three decades.

Capital Structure

The capital structure of Canadian farming is marked by very great differences between the small and large farm units. (Table 1). Only 19,666 farms, or approximately 7.2 per cent of all farms classified as commercial (farms with a value of product sold over \$2,500) had a capital investment varying

upwards from an average of \$117,000. Almost two-thirds of the commercial farms had an average capital investment ranging down from an average of \$54,255, an investment well below that regarded as necessary for an economic size of business unit in today's agriculture. In addition to this group of farms, another 152,910 farms in Canada in 1966 were classified as "small scale".

TABLE 1
Classification of Farms in Canada According to Value of Products Sold
and Capital Investment, 1966

Value of Products Sold	Canada		% of Commercial Farmers	
	Number of Census Farms	Capital Investment per farm	Farm Numbers	Value of Product Sold
		\$		
\$35,000 and over.....	10,282	176,940	3.8	14.3
\$25,000 to \$34,999.....	9,384	117,694	3.4	9.8
\$15,000 to \$24,999.....	31,149	92,763	11.2	21.6
\$10,000 to \$14,999.....	44,217	69,138	15.1	19.3
\$ 7,500 to \$ 9,999.....	38,753	54,255	13.1	11.5
\$ 5,000 to \$ 7,499.....	58,103	43,193	20.9	12.6
\$ 3,750 to \$ 4,999.....	37,923	34,363	13.0	5.8
\$ 2,500 to \$ 3,749.....	47,024	28,369	16.9	5.1
Total commercial farms.....	276,835	58,172	100.0	100.0
\$ 1,200 to \$ 2,499.....	60,947	22,563		
\$ 250 to \$ 1,199.....	55,271	15,502		
\$ 50 to \$ 249.....	36,692	14,901		
Total small scale farms.....	152,910	18,172		
Institutional.....	777	227,920		
Total Census Farms.....	430,522	44,258		

One of the more outstanding aspects of the farming industry is the apparent high correlation between capital investment in the farm business and value of products sold. According to calculations which we have been able to make, it is estimated that the top third of the commercial farmers produced almost two-thirds of the products sold by all commercial farmers.¹ Expressed another way, if the bottom 84,947 commercial farmers were suddenly removed from agriculture, the reduction in overall agricultural output would hardly be noticed—a drop in production of only 11 per cent.

¹ A commercial farm was defined in the 1966 census as any farm selling more than \$2,500 worth of produce.

TABLE 2
Capital Investment in Canadian Farms Classified by Province, 1961 and 1966

Province	1961				1966			
	No. of Farms		Aver. Capital/Farm		No. of Farms		Aver. Capital/Farm	
	Census	Commercial	Census	Commercial	Census	Commercial	Census	Commercial
Newfoundland.....	1,752	281	13,663	33,219	1,709	301	17,761	47,851
Prince Edward Island.....	7,335	2,886	13,128	19,951	6,357	3,328	20,233	28,813
Nova Scotia.....	12,518	3,016	11,199	23,373	9,621	2,867	17,061	32,450
New Brunswick.....	11,786	3,073	12,334	22,866	8,706	2,938	17,318	30,839
Quebec.....	95,777	38,927	16,925	24,202	80,294	41,961	23,548	31,084
Ontario.....	121,333	69,667	30,922	40,500	109,887	70,724	44,401	56,287
Manitoba.....	43,306	24,286	26,839	37,337	39,747	27,372	43,934	57,440
Saskatchewan.....	93,924	63,546	30,472	37,984	85,686	69,962	57,109	65,424
Alberta.....	73,212	45,203	37,118	51,223	69,411	48,971	60,734	76,262
British Columbia.....	19,934	8,150	32,858	54,422	19,085	8,407	49,953	78,111
Canada.....	480,903	259,037	27,389	38,659	430,522	276,835	44,258	58,187

The extreme differences in capital investment and income among Canada's 430,522 farmers make it obvious that it will be very difficult to develop a national credit policy which will be acceptable by all farmers of this country. A credit policy which is suitable for the 19,666 largest farms in Canada certainly would not be the best policy for the 84,947 commercial farmers whose capital investment varied downward from an average of \$34,363 in 1966. We will have more to say about this issue later.

Another striking feature of the capital structure of Canadian farming is the great variation which exists among the ten provinces (Table 2). In Alberta, for example, the average investment for the commercial farms in that province in 1966 amounted to \$76,262 compared to \$28,813 for the commercial farms in Prince Edward Island. In other words, the average commercial farm in Alberta had a capital investment almost 2½ times as large as that in Prince Edward Island. The capital-income relationship discussed above is one of the major reasons why farm income in the four Atlantic Provinces tends to be well below that of the other provinces in Canada.

It is estimated that Canadian farmers had a total outstanding debt of \$3.8 billion in 1967 (Table 3). The amount of debt outstanding more than doubled during the seven-year period 1960-67. Of the total investment of \$21.2 billion in the Canadian agricultural industry in 1967 debt represented only 18.2 per cent of this total. Canadian farmers own a surprisingly large proportion of their total farm assets at the present time.

One cannot but be impressed with the capital reorganization which will be needed on many farms in Canada if the scale of operations which is now possible is to take place. This extremely important aspect of the agricultural industry is frequently overlooked in many of the debates relating to agricultural policy in Canada. Long before the production of agricultural products is taken over by large, integrated industrial corporations in Canada—the fear of many farm leaders—the revolution created by having all farms reach the standards now set by the top commercial family farmers would be dramatic, indeed.

TABLE 3
The Ratio of Farm Debt to Farm Investment

Year	Farm Debt	Investment in Farm Real Estate, Machinery and Livestock	Debt as a per cent of Investment
	(millions of dollars)		%
1960.....	1,588.9	12,680.0	12.5
1961.....	1,768.4	13,159.2	13.4
1962.....	1,991.9	13,684.0	14.6
1963.....	2,261.9	14,541.0	15.6
1964.....	2,568.9	15,790.1	16.3
1965.....	2,947.7	17,286.8	17.1
1966.....	3,375.7	19,224.0	17.6
1967.....	3,859.9	21,186.0	18.2

SOURCE: Rust, R. S. *Farm Credit Reviewed Canadian Farm Economics*, Canada Department of Agriculture; Vol. 4; October, 1968.

Farm management studies in various regions of Canada have demonstrated repeatedly the high correlation between size of business as measured in capital investment and net farm income. The capital-income ratio will vary, of course, from one region to another but the underlying relationship cannot be overlooked.²

The big advantage of larger farm size appears to be the economies of scale involved. In Saskatchewan for example the production costs per cultivated acre (in the dark brown soil zone) varied from \$46.32 for the group farmers who had an average capital investment of \$84,968 (and a cultivated land area of 462 acres to a low of \$21.29 per cultivated acre for the group of farmers with an average capital investment of \$262,894 and a cultivated land area of 2,365 acres (Figure 1). Between the high and the low cost group of farms the difference in production costs would have amounted to approximately \$25.00 per acre.

TABLE 4
Number of Permit Holders and Wheat Acreage Related to Size of Farm, Prairie Provinces, 1967

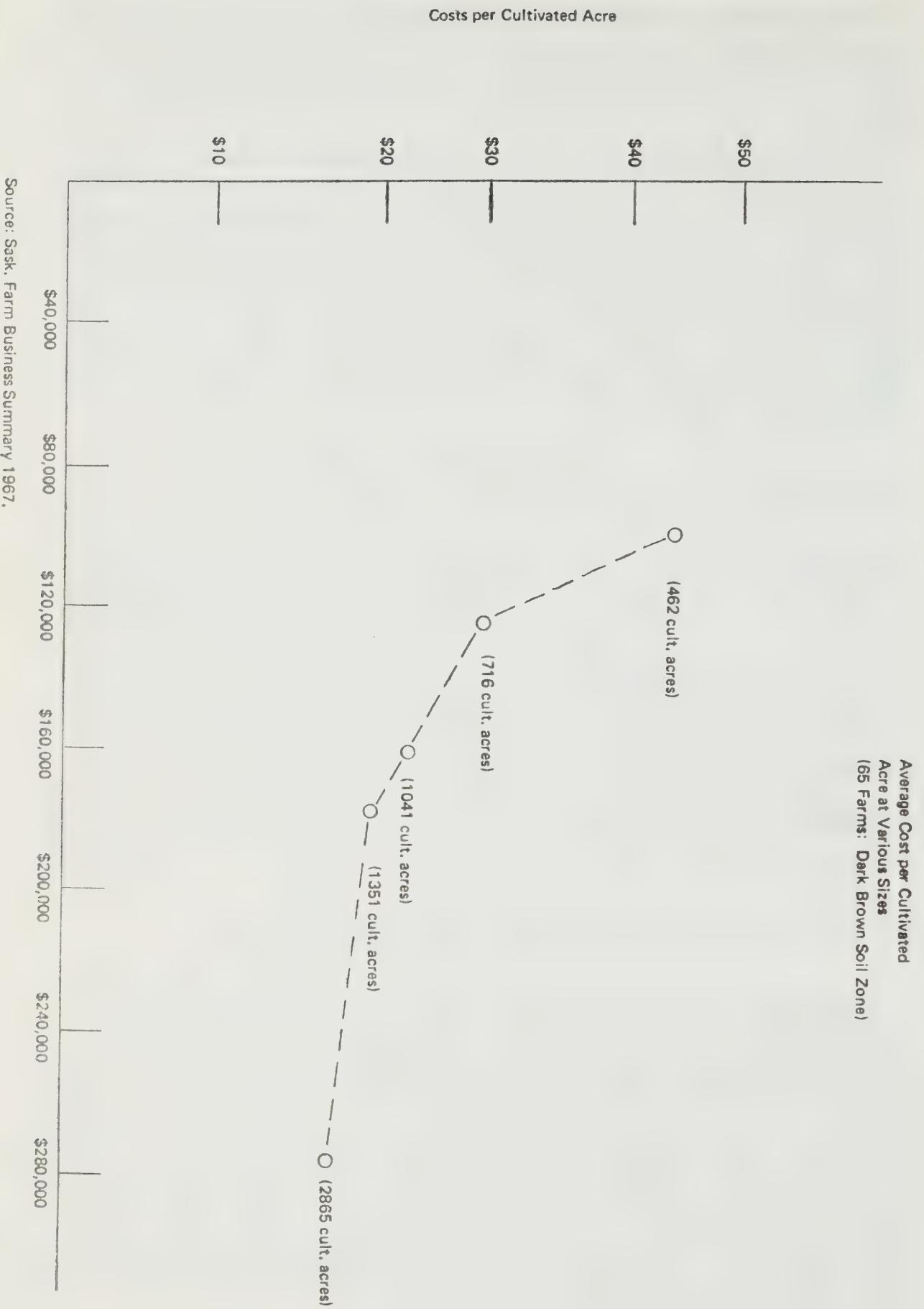
Specified Acreage Grouping	Wheat Acreage	Number of Permit Holders	Percent distribution of acreage in each group	Percent distribution of permit holders in each group
	(thousand acres)	number	%	%
0- 399	7,704	112,120	25.4	58.7
400- 699	9,564	49,009	31.5	25.7
700- 999	5,897	17,532	19.4	9.1
1,000-3,999	6,965	12,169	22.9	6.4
4,000 plus	244	156	0.8	0.1
Total	30,374	190,986	100.0	100.0

SOURCE: Canadian Wheat Board, *Statistical Report of Farm Acreages 1967*.

The tremendous variation in farm size in the Prairie Provinces may be noted in Table 4. In the smallest size grouping of farms, those with less than 400 specified acres, 112,000 permit holders or 58.7 per cent of all permit holders are involved and these producers were responsible for 7.7 million acres or 25.4 per cent of all wheat acres in 1967. Farms with a specified acreage of 400 to 699 acres on their farms produced wheat on 9.6 million acres or 31.5 per cent of all wheat acres. There were 49,000 permit holders on farms of this size or 25.7 per cent of all permit holders. The remaining 15.7 per cent of permit holders located on the larger farms were responsible for 43.1 per cent of all wheat acres. Thus the bulk of the crop was produced by a small number of large producers.

² For further examples see: Ontario Dept. of Agriculture Preliminary Summary—*Ontario Farm Management and Accounting Project, 1967*; also Alberta Dept. of Agriculture, *1967 Farm Business Report: Farm Business Summary*, Manitoba Dept. of Agriculture, 1969.

FIGURE 1 AVERAGE CAPITAL INVESTMENT PER FARM



Discretion must be used in recommending an increase in size of farm business (measured either in acres or capital investment) as a solution for the low income farmers. First of all, not all farmers have the managerial capacity to handle a larger size of business. Secondly, not all types of agricultural production have the economies of scale involved that the above examples have illustrated. Thirdly, some of the most efficient farmers in Canada are those who have the unique capacity to make a more intensive use of their fixed capital investment. Size of business is not sufficient by itself as the means of raising farm income but it does appear to be one of the overwhelming considerations involved in any reorganization of the agricultural industry in Canada.

Credit Problems Peculiar to the Family Farm

A glance at the financial pages of the newspaper will remind the reader that Canadian farmers do not finance their business operations in the same way that many industries do. Farmers do not ordinarily raise their required equity capital through the sale of shares in the market nor do they tend to follow the methods of obtaining debt capital for their operations that many industrial businesses normally use. Indeed, most lending institutions dealing with agriculture have special provisions under which credit is extended to farmers. To understand the reasons for this traditionally unique approach to agricultural credit, one must first examine the basic characteristics of the farms being financed.

While there are several different types of production firms in agriculture, the single proprietorship is the predominant type of business organization in agriculture at the present time. Ownership and management control, as well as the required labour for the business, are generally identified with one person or family.³ This is what most farmers have in mind when they refer to the "family farm" in Canada. While there are probably as many definitions of the family farm as there are points of view on the topic, one of the most commonly accepted definitions involves the following considerations:

- (1) The farm operator makes all or most of the managerial decisions;
- (2) The farmer and members of his family supply most of the labour needed;
- (3) The available farm resources are sufficient to provide the family with at least a minimum standard of living;
- (4) Tenure is reasonably secure for the operator and his family.

Several implications of the above definition must be recognized. The first two considerations tend to impose an upper limit on the size of farm that will qualify as a "family farm". The third consideration places a lower limit on the size of farm that will qualify as a family farm while the fourth consideration permits the tenant-operated farm to qualify as a family farm, providing that the condition for "reasonable security" of tenure is met.

³ By contrast, the functions of ownership, management and labour tend to be distinct and separate, and associated with different groups, in the industrial corporate economy.

This "Procrustean" philosophy of farm size explains why a great deal of debate has centered around the minimum and maximum quotas set by the Canadian Dairy Commission and the maximum amount of credit which can be loaned to any one farmer under the various government credit agencies.

Great care has been exercised by policy makers in the past in making sure that any public legislation relating to agriculture was consistent with the "preservation of the family farm".

While the single proprietorship still predominates in Canadian agriculture, other forms of business organizations are beginning to emerge. The partnership and the family farm corporation are beginning to take on considerable importance. The co-operative type farm has never been important in Canada although several reasonably successful attempts have been made to develop co-operative farms in Saskatchewan. While there have been spectacular attempts to develop the large industrial type corporation in agriculture, this type of production firm is as yet relatively unimportant in Canada. Contract production and some forms of integrated farming are becoming more important, however, particularly in commodities such as broilers, eggs and hogs.

The special features of the family farm which still predominates in Canadian agriculture have had a powerful influence on the capital structure and the methods of financing the agricultural industry.

It is a strongly held belief that any forces which tend to separate the tripartite functions of owner-manager-operator serve to weaken the family farm. Accordingly, whenever the owner-operator has tended to be replaced by the tenant-operator, it is felt that the family farm is falling short of the idea. Until recently, at any rate, the Canadian farmer has been very jealous of his prerogative as manager of his business. This explains why the farmer has resisted industrial intrusions into his industry such as vertical integration or "corporation farming"⁴. Another unique feature of the family farm which has had a very significant effect on the methods used to finance the farming industry is the "life cycle" through which the farm business tends to go once every generation. The family farm starts with the young farmer and ends with his retirement or death. His son, in turn, goes through the same type of cycle during his lifetime on the farm. As a result, many problems and complications have tended to be associated with the family farm: the need for an operating arrangement between parents and son when both are involved in the business; the strain on farm income during overlapping periods of the two generations; the stress involved when several sons want to farm particularly where the parents have limited capital; the need for an arrangement to transfer the family farm once every generation; the difficulties involved in providing equitable treatment to sons and daughters who have left the farm; problems connected with estate planning such as retirement plans, life insurance and estate taxes.

Perhaps, most important of all, the rapidly increasing capital requirements of the modern farm business have placed a tremendous burden on the farmer and his family to accumulate sufficient savings during their lifetime to finance the business operations. The goal of a debt free farm by the time of retire-

⁴ See, for example, Ray, V. K., *The Corporate Invasion of American Agriculture*, published by the National Farmers' Union, Denver, Colorado, 1968.

TABLE 5

Estimated Farm Credit Extended 1960 to 1967

Source and Term of Credit	Estimated Farm Credit Extended						Per cent of Credit Extended 1967	
	1960	1961	1962	1963	1964	1965		1966
								(per cent)

¹Preliminary.SOURCE: R. S. Rust, Farm Credit Reviewed, *Canadian Farm Economics*, Vol. 3, No. 4, October 1968.

ment has placed many farmers in a "forced savings trap" which is becoming more and more burdensome as the capital requirements of farming increase.

The farmer is forced into an unduly high rate of savings in order to accumulate the necessary initial equity to qualify for credit; he continues the high rate of savings during his lifetime in order to eliminate all debt by the time of retirement. Few other businesses are faced with these types of problems in financing their operations.

The tremendous variation in farm size and the great range of credit needs associated with the different regions of Canada make it difficult, if not impossible, to develop one credit policy for the entire farming industry of this country. What appears to be clear is that there is a need for essentially two different types of agricultural credit policies in Canada: one policy aimed at the needs of the viable or potentially viable commercial farmers; a different policy for the group of farmers where credit is only one of a package of public policies needed for the development of the farmer and his operations.

This classification of credit policies appears to be consistent with the growing recognition that agricultural policy, in general, must be aimed more specifically at different economic classes or groups of farmers in Canada. A credit policy aimed at the requirements of the top 7.2 per cent of the commercial farmers in Canada (see Table 1) will not be suitable for the bottom half of the commercial farmers. We will return to this issue later when we examine alternative structures for farm credit policy in Canada.

PART II

CREDIT INSTITUTIONS

In the long-term mortgage credit field, the Federal Farm Credit Corporation provided approximately two-thirds of the farmers' credit needs in 1967 (Table 6). The next most important source of long-term credit was the provincial government credit agencies. From the mere \$3 million extended in 1960, the insurance, trust and loan companies increased the amount of farm credit to \$13 million in 1967. In total, the amount of long-term credit extended to farmers in 1967 was estimated to be approximately \$376 million. It is estimated that Canadian farmers had approximately \$1½ billion of long-term mortgage credit outstanding in 1967.

The amount of intermediate-term credit extended to Canadian farmers in 1967 was estimated to be \$1.3 billion of which \$538 million was provided by private individuals. The next largest source of intermediate-term credit was the commercial banks which loaned approximately \$433 million under the Farm Improvement Loans Act in 1967. The credit unions and supply companies also provided a considerable quantity of intermediate-term credit to farmers.

TABLE 6

Veterans' Land Act: Number of New Loans and Additional Loans for Selected Years

Fiscal Year	Full-time farming			Part-time farming		
	New Loans	Additional Loans	Amount Disbursed	New Loans	Additional Loans	Amount Disbursed
	no.	no.	(\$ million)	no.	no.	(\$ million)
1943-47.....	13,094		58.6	11,285		42.6
1947-48.....	4,711		19.5	4,258		18.8
1952-53.....	1,002		5.0	3,103		14.8
1954-55.....	739	419	5.0	2,780		15.9
1960-61.....	313	1,925	16.7	1,786		13.8
1964-65.....	241	1,201	11.8	2,407	1,379	24.8
1966-67.....	269	2,044	25.8	4,140	2,690	52.1

SOURCE: Veterans' Land Act Administration

Canadian farmers borrowed slightly over \$1 billion in 1967 in the form of short-term loans. Of this amount, over half was provided by the commercial banks. In spite of the relatively high interest rate charged, farmers also obtained a considerable amount of short-term credit from the supply companies. Credit union and private individuals were also active in the short-term credit business.

It is not possible in a paper of this type to make a detailed examination of all the institutions involved in the farm lending business in Canada. The discussion here will be confined to an examination of the more general features of the farm lending organizations.

Federal 1—Farm Credit Corporation

The Federal Government is heavily involved in various ways in the farm credit field. Its most important farm credit agency is the Farm Credit Corporation. The Corporation, which replaced the Canadian Farm Loan Board in 1959, is primarily involved in long-term mortgage credit operations. The Act provides for two types of loans. Under Part II of the Act loans are made on the security of land only and the maximum loan to any one individual is \$40,000. A recent amendment to the Act provides for a maximum of \$80,000 to two individuals who combine their operations and up to \$100,000 for three or more partners or members of a farming corporation. Under Part III of the Act, farmers between the ages of 21 and 45 years of age, may receive loans up to a maximum of \$55,000 for an individual or up to \$100,000 for two or more persons farming together. The loans are supervised and are based on the security of land, livestock and machinery.

Until a recent amendment to the Act, the interest rate was set at 5 per cent for the first \$20,000 loaned under Part II and the first \$27,500 loaned under Part III. This restriction has now been removed. The rate of interest is closely related to the market cost of borrowing money by the Corporation.

Between 1958-59 and 1967-68, the annual amount of loans disbursed by the Corporation increased from \$28.4 million to \$263 million; and the average size of loan increased from \$6,089 to \$22,020.⁵

The purpose for which the new funds provided by the Corporation were used in 1968-69 were as follows:

Land secured debts.....	10.3%
Permanent improvements.....	15.9%
New units.....	15.1%
Additional land.....	49.2%
Livestock.....	1.4%
Equipment.....	1.5%
Miscellaneous.....	2.0%
Other debts.....	4.6%
	<hr/> 100.0%

At the end of 1968-69, there were over 67,108 mortgages outstanding to Canadian farmers and the total debt outstanding amounted to approximately one billion dollars.

Federal 2—Farm Machinery Syndicates Credit Act

The Farm Machinery Syndicates Credit Act which came into operation in 1965 is administered by the Farm Credit Corporation. Syndicates of three or more farmers may borrow under the Act for purchase of machinery for co-operative use. Syndicates may borrow up to 80 per cent of the value of the machinery being purchased up to a maximum of \$15,000 per member with \$100,000 being the maximum regardless of the number of members involved. From the inception of the Act in 1965 to the end of March, 1969, 577 loans were approved and a total of 1,718 farmers have taken advantage of the program. Loans ranged from \$700 up to \$45,000 with an average of \$7,800.

Syndicate Loans Approved January 1, 1965 to March 31, 1969

F.C.C. Branch	January 1, 1965 to March 31, 1969	
	Total number of loans	Total amount loaned
		(dollars)
British Columbia.....	21	128,542
Alberta.....	220	1,880,882
Saskatchewan.....	69	381,156
Manitoba.....	71	448,364
Ontario.....	89	785,746
Quebec.....	99	919,660
Atlantic Provinces.....	8	88,715
Total.....	577	4,633,065

SOURCE: Annual Report of the Farm Credit Corporation 1968-69

⁵ See the appendix for a more detailed statistical analysis of the various lending institutions in Canada. The presentation in this section is based on the G. C. Garland and S. C. Hudson study, *Government Involvement in Agriculture*.

The primary objective of the Farm Machinery Syndicate Act is to encourage farmers to meet in a more economical way some of the costs of ownership of necessary machinery and equipment.

Federal 3—The Veterans' Land Act

The Veterans' Land Act of 1942 has undergone several revisions. The maximum outstanding loan for commercial farmers at the present time is \$40,000 and \$18,000 for small family farms.

Along with its lending program, the Veterans' Land Act Administration introduced a credit advisory service which was later adopted by the Farm Credit Corporation. Since the inception of the Act, almost 32,000 veterans have been established as full-time farmers under the program. The number of farmers receiving loans under the Act has been steadily declining. During recent years, however, the total amount of credit extended to veterans has increased. In 1966-67, a total of 269 farmers received new loans and 2,044 farmers received additional loans for a total of approximately \$25.8 million.

The amount of credit extended for part-time farming has increased quite substantially during recent years. In 1966-67 a total of 4,140 new loans and 2,690 additional loans amounting to \$52 million were extended for part-time farming.

Federal 4—Farm Improvement Loans Act

The Farm Improvement Loans Act, first passed by Parliament in 1944, permitted the commercial banks to make intermediate and short-term loans to farmers with a guarantee by the Government up to ten per cent of any losses incurred on loans made under the Act. Until recent amendments to the Act, a farmer could borrow up to a maximum of \$15,000 at an interest rate set at 5 per cent. The new amendments to the Act have removed the interest rate ceiling, established an overall maximum loan limit of \$25,000 of which up to \$15,000 can be for land loans and opened the range of lenders eligible for the guarantee to include loan, trust and insurance companies, credit unions and caisses populaires.

From 1945 to the end of 1967, a total of 1,419,093 loans were made under the Farm Improvement Loans Act for a total of \$2.1 billion. More than two-thirds of all loans made under the Act from 1945 to 1967 were made in the Prairie Provinces. About 80 per cent of the loans made under the Act were for the purchase of agricultural implements, eight per cent for the purchase of livestock, eight per cent for construction, repair or alteration of buildings, and four per cent for other improvements. In view of the heavy emphasis on loans for the purchase of agricultural machinery and equipment, one farmer suggested to the Task Force that the Act should have been called the "Farm Implements Loan Act".

Federal 5—Prairie Grain Advance Payments Act

Under the Prairie Grain Advance Payments Act which was passed in 1957 to provide prairie farmers with funds when they were unable to deliver grain due to the lack of elevator space, the Canadian Wheat Board was authorized

to advance money to the farmer on the security of grain held on the farm for future delivery to the Board. Under recent amendments to the Act, the maximum possible advance was increased from \$3,000 to \$6,000; the Wheat Board can now advance payments at the rate of \$1 per bushel for wheat, 70 cents per bushel for barley and 40 cents per bushel for oats stored on the producer's farm subject to the maximum allowance of \$6,000 per applicant. Repayment of a loan is made by deducting 50 per cent of the initial payment for all grain delivered subsequent to the loan, except that delivered under a unit quota. The loan is available without interest for the period until elevator space becomes available, the interest charge on the loan being borne by the Federal Government.

During the period August 1, 1957 to July 31, 1969, the number of farmers applying for cash advance under the Act varied from 22,342 to 113,491 per year. The average size of the advance ranged from \$698 to \$1,338. Total advances were as high as \$151.8 million in 1968-69. The cost to the Federal Government for interest charges and defaulted payments for the period 1957-58 to 1967-68 amounted to \$7.5 million. The cost to the Federal Government in the form of interest free cash advances could be \$14 million in the crop year 1969-70 (see Chapter 5).

Federal 6—Industrial Development Bank

Since 1961, the Industrial Development Bank, a subsidiary of the Bank of Canada, has been able to provide mortgage loans for new and existing agricultural enterprises whose owners require assistance for sound projects, and who are unable to obtain the required financing elsewhere on reasonable terms and conditions. Loans are made through the commercial banks and have no fixed limits. During the seven years, 1961 to 1967, 1,052 loans of an average size of \$33,446 were made for agricultural purposes. The amount loaned during the period was \$35.2 million.

The Provinces

All ten provinces⁶ have been involved in the farm credit field. In 1967 it is estimated that the provincial government credit agencies extended \$63.6 million of farm credit and the total outstanding farm debt owing to the provinces amounted to \$332.3 million.

British Columbia

The Farmers' Land Clearing Assistance Act, designed to help farmers finance the clearing and breaking of land, is administered by the Minister of Agriculture. Repayment of the loan is by equal annual instalments, during a period of 15 or 20 years and the interest rate is four per cent. During 1967, there were 339 loans extended for a total of \$529,487. At the end of 1967, there were 1,338 loans outstanding for a total of \$1.8 million.

The provincial government under the Distress Area Assistance Act may enter into an agreement with the Federal government to share equally in a

⁶ The description provided here of the provincial farm credit programs is drawn from the Garland and Hudson study, *Government Involvement in Agriculture*.

guarantee to a bank against losses from loans made to farmers in a distress area under the Federal Farm Improvement Loans Act, for the purpose of replanting crops or purchasing feed. The provincial government may also enter into an agreement with a bank whereby the province guarantees a part of the losses of loans made in distress areas. The maximum loan is \$5,000 and the interest rate is six per cent.

Alberta

Under the Farm Purchase Credit Act in Alberta, a farmer may borrow up to \$24,000 or 80 per cent of the selling price of the land. The maximum value of the farmland owned and to be purchased cannot exceed \$50,000. At December 31, 1967, there were 2,850 loans outstanding for a total of \$23.1 million. Under the Alberta Feeder Association Loans the provincial government will guarantee 25 per cent of the loss sustained by any person on a loan made to a feeder association. The farmer who must be a member of a feeder association may obtain a loan up to \$3,000 in his first and \$6,000 in his second year of feeding. During 1967, loans totalling \$6.2 million were extended to 1,229 members of feeder associations at an interest rate of six per cent.

Saskatchewan

The Saskatchewan Family Farm Credit Act provides loans to farmers up to \$25,000 and are not available to farmers whose assets exceed \$35,000. Since the inception of this program in 1959, more than \$7 million has been loaned to farmers.

In November, 1969, the Government of Saskatchewan passed legislation known as the *Livestock Loans Guarantee Act* which provides for the following: banks or credit unions loaning to farmers under the Act have a government guarantee against losses sustained up to a maximum of 25 per cent of the aggregate valued loans made; an interest rate ceiling (presently seven per cent) above which the government will subsidize the interest rate for the first three years of the loan; the maximum size of loan under the Act to be \$6,000 repayable over a period not exceeding seven years. The primary purpose of the Act is to encourage farmers to establish livestock enterprises.

Manitoba

In 1968, after eight years of active lending to farmers, the Government of Manitoba repealed its Farm Credit Act and replaced the Agricultural Credit Corporation with the Manitoba Agricultural Credit and Development Corporation under the Manitoba Agricultural Credit and Development Act. The 1968 legislation in Manitoba provides for a guarantee or underwriting of a percentage of losses sustained by banks and other approved lending institutions in respect to lines of credit including short and intermediate term loans made to farmers. During the eight years ending March 31, 1967, the Manitoba Agricultural Credit Corporation approved loans totalling \$41.3 million of which 74.4 per cent was for the purchase of land.

In October, 1969, the Government of Manitoba introduced a new Agricultural Credit Corporation Act. The new Act retains the loan guarantee features

of the previous legislation and, in addition, provides for the reactivation of direct lending to farmers. The direct loans to farmers by the Agricultural Credit Corporation may include a complete line of credit—long, intermediate and short-term credit. A major provision of the new Act enables the Credit Corporation, with the approval of the Provincial Government, to acquire farmland by lease or purchase. This feature of the Act will permit the withdrawal of equity capital by those farmers wishing to leave agriculture and the creation of viable farm units through consolidation of the uneconomic units. The interest rate to farm borrowers under the Act will equal the cost of money to the government while the administration costs of the program will be borne by the government itself.

Ontario

The Ontario Junior Farm Establishment Loan Corporation ceased to operate in February, 1969. It made loans to qualified junior farmers, to owners of family farms and incorporated family farms where one of the family members was a junior farmer, and to farmers who operated a farm as a partnership where one of the partners was a junior farmer. The total amount of debt outstanding as of March 31, 1967, was \$57.9 million.

Quebec

There are several types of credit legislation in Quebec. Under the Quebec Farm Credit Act of 1936 (amended several times and again in 1969), two types of loans are available: a *Regular Loan* and an *Establishment Loan*. The Regular Loan cannot exceed 90 per cent of the appraised value of the property or \$25,000, whichever is lesser and is repayable over a period not exceeding 39½ years. From the institution of the Act in 1936 to December 31, 1968, loans have been made totalling more than \$371 million. Under an amendment of the Farm Credit Act in 1961 and 1969 an *Establishment Loan* was provided for the purchase of an economic farm unit to farmers between 21 and 40 years of age. The loan cannot exceed 90 per cent of the appraised value of the property or \$25,000. The interest rate on the first \$15,000 loaned is 2½ per cent and the repayment period up to 39½ years.

The rate of interest on the portion of the loan in excess of \$15,000 will be fixed by regulation. A special rebate of one-third of the amount of the loan (maximum of \$3,000) is granted after 10 years provided occupancy and other conditions have been met.

Under the Quebec *Farm Improvements Loan Act*, the provincial government may make interest rebates and guarantees to banks and credit unions on certain types of loans made to farmers. The maximum amount of the loan to a farmer is \$10,000. The provincial government repays the farmer who has borrowed from an approved source, an amount equal to three per cent interest on the loan. The government also guarantees to pay banks or credit unions up to 10 per cent of the total losses of capital and interest resulting from loans made under this program. From the institution of the program in 1962 to December 31, 1968, almost \$153 million have been loaned under the Act.

Finally, the *Quebec Farm Loan Act* enables farmers who borrow from the Federal Farm Credit Corporation or the Veterans' Land Administration, to

have loans at an interest charge similar to that for farmers who borrow from the Quebec Farm Credit Bureau. In general, provision is made for payment to the farmer by the provincial government of an amount equal to that paid in interest in excess of a rate of $2\frac{1}{2}$ per cent on loans from the federal credit agencies.

New Brunswick

Under the New Brunswick *Farm Adjustment Loans Act*, the Farm Adjustment Board may make loans for the purchase of farms, additional farmland, machinery and livestock and for the erection of farm buildings. At March 31, 1967, loans outstanding totalled \$2½ million. The New Brunswick *Farm Credit Assistance* legislation which was enacted in 1966, provides for the payment by the Province of the difference, not exceeding three per cent, between an annual interest rate of $2\frac{1}{2}$ per cent and that charged by the Federal Farm Credit Corporation on loans made to farmers in the province. Under the Farm Loans Guarantee legislation the Province guarantees 50 per cent of the loss or \$2,500, whichever is the lesser, to a bank or a credit union which makes a loan to a farmer for the purchase of livestock.

Nova Scotia

In 1967, Nova Scotia passed a new act related to farm credit. The new legislation which is administered by the Nova Scotia Farm Loan Board provides for loans to individuals, partners or members of a limited corporation up to a maximum of \$100,000; a part-time farmer may obtain a loan up to a maximum of \$20,000.

Prince Edward Island

In Prince Edward Island legislation providing for loans to farmers by the provincial government is administered by the Farm Establishment Board. The loan cannot be more than 85 per cent of the appraised value of the security or \$10,000. An additional loan of up to \$10,000 or 85 per cent of the appraised value of the security may be obtained for the purchase of land.

Newfoundland

The Newfoundland Farm Development Act passed in 1953 is designed to aid farmers to improve or enlarge their farming operations. Loans made for the improvement of farmlands or the purchase of livestock may not exceed 75 per cent of the appraised value of the security, and those loans used for the purchase of farm equipment may not exceed 70 per cent of the cash price of such equipment. A farmer may obtain loans up to \$3,500 for the purchase of livestock and up to \$3,000 for the purchase of farm equipment. The interest rate on all loans is $3\frac{1}{2}$ per cent.

The Commercial Banks

From the standpoint of the private sector, the commercial banks are by far the most important source of short-term credit for farmers. In 1967, the commercial banks extended a total of \$203.7 million under the Farm Improvement Loans Act and another \$733 million of ordinary loans to Canadian farmers. In addition, the commercial banks are an important source of credit to many of the farm supply industries who, in turn, extend credit to

farmers in recent years. The commercial banks have tended to concentrate on the short-term credit needs of farmers and, indeed, until the change in the Bank Act in 1967, the banks were not permitted under normal circumstances to make mortgage loans on farmland. The present Bank Act does permit the commercial banks to take mortgages on real estate; whether this becomes an extensive practice remains to be seen. Until recently, the commercial banks have made no serious attempt to develop specialized farm credit facilities as many of the banks in the United States have done. However, there are encouraging signs that the Canadian banks may be beginning to realize the unique needs of the modern commercial farmer. The recent establishment of agricultural departments by several of the banks is a commendable step in the right direction. Credit institutions who deal in any extensive way with the agricultural industry will have to become more conversant with the current developments which are taking place in the field of farm management.

PART III

AN EVALUATION OF CREDIT POLICIES AND ISSUES

During recent years many worthwhile changes and amendments have been made in farm credit policies and practices in Canada. On the other hand, many limitations and weaknesses still remain to be resolved. We will examine some of the major features of agricultural credit in Canada and present a brief evaluation of each.

1. Duplication of Credit Facilities

One of the more striking features of farm credit in Canada is the great number of agencies and institutions involved in providing credit to farmers. From the standpoint of the public sector alone, the Federal Government is involved in several different types of farm credit and all ten provinces have been involved in one way or another in the farm credit business. It would appear reasonable and sensible for the Federal Government to bring about a greater degree of co-ordination and integration among its various agricultural credit policies. Why, for example, are maximum loan limits provided for under the Farm Credit Corporation and Development Bank? Why should the loans provided for under the Prairie Grain Advance Payments Act not be provided and administered under the Farm Improvement Loans Act? Why, in view of the provisions made under Part III of the Farm Credit Act, should the Farm Improvement Loans Act and the Farm Credit Act not be administered from one Department of Government? Why, indeed, should several different departments of the Federal Government be involved in the administration of agricultural credit?

There appears to be considerable duplication of resources and effort between the federal and provincial farm mortgage credit agencies. While many of the provinces do have provisions under their farm credit legislation which are different from those of the federal farm credit agencies, neverthe-

less the primary objectives and lending practices of the federal and provincial credit institutions are remarkably similar.⁷

An additional difficulty insofar as the federal farm credit institution is concerned, involves the area of farm management and extension activities. From a constitutional and jurisdictional point of view, the provinces claim responsibility for the provision and administration of agricultural extension services and, yet, the Federal Farm Credit Corporation must inevitably become involved in farm management and extension activities, particularly under Part III of the Farm Credit Act. This is an issue which will bear very careful examination.

2. Interest Rates

The recent move by the Federal Government to remove the interest rate ceilings under the Bank Act, the Farm Improvement Loans Act, and the Farm Credit Act will eliminate many of the anomalies which resulted from such restrictions. Farm borrowers, of course, prefer low to high interest rates, but there is little doubt that the rigid interest rate ceilings of the past have restricted the flow of much needed credit into agriculture, particularly during times when the market rate of interest has been high. In addition, the restricted rates of interest have prevented the credit institutions from providing many of the services now expected from progressive lending institutions.

The practice of subsidizing interest rates, a very contentious issue, does not represent, in our view, a desirable policy. If the returns to investment in agriculture are low relative to the interest rates on borrowed capital, the remedy should focus on the low returns, not the interest rate. If the interest rates are high—extra-ordinarily high as they are at the present time—the solution must be found in reducing the market rate of interest, not subsidizing it. We feel that adequate monetary and fiscal policies, and aggressive competition among the various lending institutions are the best means of protecting farm borrowers against unduly high rates of interest.⁸

While the Task Force does not favour the use of subsidized interest rates as a general practice, it does recognize that several of the provincial credit agencies have particular policies which provide subsidized interest rates to young farmers, low-income farmers, Saskatchewan Livestock Loans Guarantee Act, etc., as part of a general agricultural policy or program. Such a practice may have short-run beneficial effects particularly when interest rates are unusually high as in 1966-70.

⁷ While duplication does appear to exist between the federal and provincial credit agencies, it should be noted that several of the provincial credit agencies have provided credit to farmers unable to obtain loans from the federal agency. This appears to have been particularly true for young farmers. Regional differences in Canada make it difficult for a federal agency to formulate nation-wide policies which will be equally applicable in all regions of the country.

⁸ See, for example, the *Report of the Royal Commission on Banking and Finance*, p. 561: We have emphasized throughout our report the advantages of allowing the financial institutions to compete as freely as possible for business, subject to the regulation necessary for the protection of their customers. Many of the present investment restrictions contribute nothing to public protection, impose inequitable constraints on the institution and thus serve only to reduce the efficiency with which a more competitive system could serve the country. These blockages in the financial system frequently cause the public to pay higher prices for credit, and sometimes prevent it from getting credit at all.

The Task Force also supports the proposal that all interest charges, particularly on trade credit, should be expressed as a simple interest rate. It is difficult to understand why farmers continue to use high-cost trade credit when other lower-cost sources of credit are available, unless it is because they do not know what the actual interest charge is on the trade credit. Interest rate disclosure would, at least, provide the farm borrower with an opportunity to shop for his credit needs.

3. *Maximum Loan Limits*

While the Federal Government has recently increased the loan limits under its various credit Acts to levels more nearly consistent with the credit needs of the commercial farmer, several of the provinces still have loan limits far too low to encourage an efficient and healthy agriculture. There are a growing number of farmers—family farmers—in Canada whose credit needs go well beyond the maximum loan limits now provided for under many of the provincial farm credit acts. Unduly low loan limits are an effective way of perpetuating poverty in many parts of Canada.

4. *Emphasis on the Farm Management Approach to Lending and Borrowing*

Traditionally, farm lending institutions, both public and private, have depended almost exclusively on the value of assets owned by a potential borrower as the basic criterion of his eligibility for a loan. In some instances, the lender has not been particularly interested in how the loan was invested so long as there was adequate security to cover the debt. This approach to farm lending is understandable. First of all, the lender wishes to ensure that he will be in a position to recover the full value of the outstanding debt through the sale of the assets should the borrower default on his loan. Secondly, the security approach to lending is relatively easy to administer—the lender is not required to know much about the technical operations of the borrower's business so long as there is ample security to back the loan.

Pushed to the extreme, however, the "security approach" to farm lending means that only the well-established farmers—generally the farmers least likely to want credit—are eligible for loans. As one farmer expressed it:

Money is what you can get if you have credit; credit is what you can get if you have enough money so that you don't need it.

Lending institutions must have, of course, some form of security for their loans to farmers. But increasing emphasis will need to be placed on the farm management approach to lending and borrowing. The farmer must be prepared to submit a profit and loss statement on his business and a budget indicating how the credit is to be used. The lending institutions will have to know as much about modern farming practices as the best commercial farmers.

It is gratifying to note that a growing number of farmers not only can provide the lender with a well analyzed set of financial accounts but they can also provide him with a well defined budget or plan of how they propose to invest the borrowed capital in their businesses. Many of the lending institutions have recently taken steps to develop a specialized credit program for farmers.

5. Credit requirements for different types of farmers

We emphasized earlier that a credit policy which is suitable for the established commercial farmer is not likely to be adequate for the small, low-income farmer. In view of the growing need for a clearer distinction between a commercial policy for agriculture and a rural development policy for low income farms, we suggest that two separate types of credit policy be established: a credit policy for commercial farmers and a separate credit policy for low income or sub-commercial farmers. A rural development credit policy would place as much emphasis on the development of management skills as it would on the provision of credit. The commercial farm credit policy would be primarily concerned with the provision of adequate loaning facilities for the commercial farmer.

6. Forced Savings Trap in Agriculture

The growing capital requirements of the modern farm business have made it increasingly difficult for the farm family to accumulate the necessary capital once every generation to finance the business. Farmers are caught in a "forced savings trap" that is becoming increasingly more burdensome. It may be that some radically different way of financing the agricultural industry will have to be developed within the next few years. It does not appear that more liberal credit arrangements will provide the answer. As long as farmers insist on complete control and ownership of the equity capital in agriculture and a debt-free farm by the time of retirement, a high rate of forced savings will continue to characterize the industry. New methods of financing the agricultural industry, however, will call for radical changes in the traditional forms of management and ownership in agriculture. How the new methods of financing the agricultural industry can be reconciled with the deeply-rooted tradition of the family farm is one of the more fundamental questions of agricultural policy at the present time.

7. Meeting Short-Term and Intermediate-Term Needs

The short and intermediate-term credit needs of Canadian farmers should continue to be provided primarily by the commercial banks. At the moment, commercial banks supply over fifty per cent of this type of credit and there is no reason why the banks cannot continue to assume this important responsibility. However, the Task Force feels that the commercial banks should place greater emphasis on the following practices:

- (1) Agricultural departments within the banks should become the rule rather than the exception. The complexity of modern day farming practices calls for a high degree of sophistication and specialization in farm lending policies.
- (2) Greater emphasis should be placed on "farm management loans" rather than on the traditional security approach to farm lending.
- (3) The banks should make every attempt to integrate their lending activities with the long-term government credit programs. It appears

to be desirable for governments to establish a "guarantee against loss" for bank loans made to farmers under certain circumstances e.g. operating credit for sub-commercial farmers.

- (4) The commercial banks should aim to take-over a considerable part of the high interest farm credit now provided by farm supply firms. It is hard to understand why farmers continue to use "farm supply" credit when loans can be obtained from the commercial banks at lower interest rates. Perhaps this practice has persisted because of the lack of agricultural specialists in the commercial banking system.
- (5) The commercial banks could benefit greatly by a closer liaison with the provincial farm management extension agencies. The provincial farm management extension agencies are providing services in the form of farm accounting, data processing, budget analysis, etc. which could be of invaluable help to the banker in assessing the credit needs and management capacity of the farmer.

Credit and management have become the key inputs in modern commercial farming. Credit by itself can be a liability if the farmer does not have the management ability to use the credit wisely. On the other hand, management ability is of little value if the farmer does not have the necessary capital to finance his operations. The modern progressive lending institution should have the capacity to service both the capital and management needs of the commercial farmer.

PART IV

FOUR ALTERNATIVES IN PROVIDING FARM MORTGAGE CREDIT

There are several different programs and organizational structures which could be used in providing farm mortgage credit. In this section, the Task Force describes four of these alternatives:

1. The Present System
2. Mortgage Insurance
3. Co-operative Credit System
4. Federal-Provincial Credit System

The Task Force advanced the Co-operative Credit System for discussion at the Canadian Agriculture Congress in March 1969. It became apparent then and upon later consideration, that while this system has many good features, it does not seem appropriate at this time. The Task Force recommendations propose a Federal-Provincial Credit System.

ALTERNATIVE ONE

CONTINUATION OF PRESENT STRUCTURE

The Federal Farm Credit Corporation and the provincial credit agencies would continue to provide farmers with long-term mortgage credit. While these agencies have done a good job within the legislative framework provided, there remain the problems of duplication, restrictive loan-limits set by several of the provincial credit agencies, subsidization of interest rates, difficulty in mobilizing the necessary capital funds by many of the provinces, a lack of suitable credit facilities for sub-commercial farms, and the jurisdictional serious problem between the Federal and provincial farm credit agencies in providing farm management and supervisory credit services. The provinces claim that they have a traditional and constitutional responsibility for all matters relating to agricultural extension activities; many regard the involvement of the Federal Government in farm management advisory services through the Farm Credit Corporation as an intrusion into traditional provincial territory. The Farm Credit Corporation, on the other hand, cannot properly perform its function as a lending agency unless it does become heavily involved in the provision of farm management services, particularly under Part III of the Farm Credit Act. It appears unlikely that anything can be done about this problem as long as both the Federal and provincial governments are directly and separately involved in the agricultural credit field.

Another aspect of the Federal Government involvement is the large number of Federal departments which are currently involved, either directly or indirectly, in the farm lending business. These include the Department of Agriculture, through the Farm Credit Corporation, the Department of Veterans' Affairs, the Farm Improvement Loans Act administered under the Department of Finance, the Prairie Grain Advance Payments Act administered through the Canadian Wheat Board under the jurisdiction of the Department of Trade and Commerce, the Industrial Development Bank, a subsidiary of the Bank of Canada and the ARDA-FRED programs, administered under the Department of Regional Economic Expansion, which make provisions for various forms of capital grants and for the purchase and sale of farmland. This multiplicity of federal credit agencies must inevitably result in confusion, conflict and inefficiency. If the Federal Government is to continue its involvement in these various fields, it would seem prudent to integrate and consolidate many of the agencies involved. Furthermore, if the Federal Government is to have one credit policy for Canadian agriculture it would seem prudent to have one department administer such a policy.

ALTERNATIVE TWO

A FARM MORTGAGE INSURANCE PROGRAM

Several policies and techniques have been used by governments to encourage private lending agencies to enter the farm credit business. One technique used by the Federal Government has been the "guarantee against loss" type of program. Under the Farm Improvement Loans Legislation, for example,

the Federal Government guarantees each bank against losses sustained by it up to an amount equal to 10 per cent of loans granted by it in a lending period. Losses under this program have been relatively small. Claims paid by the Federal Government under the repayment guarantee, between 1945 and 1967, totalled 3,432 or about 0.2 per cent of all loans made. Claims paid, plus interest and collection costs, totalled \$2.7 million, just over 0.1 per cent of the total amount extended in loans, and of this amount \$361,000 was later recovered.

Another technique which has been widely used in the housing industry since 1954 and which may have merit for agricultural lending is the insured mortgage. The insured mortgage provides protection to the lender against loss. The insurer in the case of the insured mortgage loan for housing in Canada has been the Central Mortgage and Housing Corporation. The insured mortgage for agricultural lending purposes has not been used to date in Canada.⁹

The insured mortgage approach appears to have particular merit in situations where risk of loss to the private lender is such that it restricts lending or discourages it altogether. This appears to be true to a degree in the agricultural industry where crop yields and prices are notoriously unstable—factors which tend to discourage the private lender from investing in agriculture when more attractive alternatives are available.

There are several ways in which the insured mortgage may be used to induce the private lending agencies to channel more credit into the agricultural industry. The insured mortgage may be used to encourage the private lender to extend more credit to the individual farmer, given his security, than would normally be the case. For example, the private lender may tend to restrict the size of loan to about 50 per cent of the value of the property offered as security for the loan. He may be encouraged to extend the size of the loan (e.g. to 80 per cent of the value of security offered for the loan) if insurance were available on the additional credit extended. An alternative would be to insure the full value of the loan extended. The latter case, of course, would involve a relatively larger mortgage insurance premium.

It is difficult to know what a proper or adequate premium rate for an insured mortgage should be in the case of agriculture.¹⁰ We might look to the home mortgage business for some indication of what rates might be suitable.

⁹ This technique has been used by the Farmer's Home Administration (F.H.A.) in the United States. In 1948, the way was opened to draw upon private loan funds for agricultural purposes by authorizing the F.H.A. (a Federal government agency) to insure farm ownership loans advanced by a private lender. The F.H.A. guarantees to the lender full payment of any loss. The mortgage insurance fee which is paid by the borrower was set originally at an annual rate of $\frac{1}{2}$ per cent of the loan.

¹⁰ In Great Britain, where the "excess risk" only is insured, the usual premium rate is about $7\frac{1}{2}$ per cent of the amount insured. For example, if the property value is \$10,000 the normal loan would be about \$8,000. The loan might be increased to \$9,000 if mortgage insurance is available on the extra \$1,000 loan. The premium for such coverage would be about \$75 and it would be paid as a single premium.

In the United States, the mortgage insurance premium rate under the Federal Housing Administration amounts to about $\frac{1}{2}$ per cent of the average monthly balances for each year, i.e. the premium is based on the monthly reducing principal balances of the mortgage loan. Some private insurance companies offer a single premium plan which covers the initial 10 years of the loan with single premiums ranging from $1\frac{1}{4}$ to 2 per cent, depending on the loan amortization rate.

In 1954, when a mortgage insurance plan was first offered in Canada under the Central Mortgage and Housing Corporation, a base figure of $\frac{3}{16}$ per cent per annum was adopted. This annual rate was converted to a once-and-for-all single premium on the assumption that a 25-year loan amortization plan was involved and that risk of loss could be disregarded when a loan had been reduced to a point where only 40 per cent was unpaid. Under these assumptions, the single premium amounted to $1\frac{1}{2}$ per cent of the original amount of the loan. (An additional $\frac{1}{4}$ per cent was added as a single premium if loan advances were made during construction.) Under this arrangement, if a loan of \$10,000 was arranged on which the insurance fee was two per cent, the mortgage would be written for \$10,200. The borrower would receive advances totalling \$10,000 but he would repay \$10,200 over the amortization period.

The C.M.H.C. has established a Mortgage Insurance Fund into which all mortgage insurance premiums are paid. When property is acquired by a lender as a result of default by the borrower, the lender has the right of election to retain the property or to transfer it to the C.M.H.C. in exchange for a cash settlement.

One incidental, but important, aspect of the insured mortgage is that such a mortgage is more marketable (i.e. more attractive) if the primary lender wishes to sell the mortgage to some other investor. This could be of significance in the case of the commercial banks which are permitted to make farm mortgage loans but which may later wish to sell such mortgages to other commercial institutions interested in holding long term investments.

What the premium rate should be for insured farm mortgages is difficult to decide but one might look to the experience of the Farm Credit Corporation for guidance. During the 1968-69 fiscal year, for example, the net loss on 67,108 outstanding farm loans amounting to \$1 billion was \$45,020—a remarkably small amount. The loss under the Farm Improvement Loans Act for the period 1945-67 amounted to 0.2 per cent. It would appear that the necessary premium rate for a farm mortgage insurance plan could be achieved at reasonable cost to the borrower.

The primary value of a farm mortgage insurance program would be to encourage private commercial lending institutions to enter the agricultural credit business. If a sufficient volume of credit could be made available to farmers by the private lending institutions, the necessity of having governments involved in the farm lending field might be removed. The role of the government might be confined to the farm mortgage insurance business in a manner similar to that of the C.M.H.C. in the housing industry.

Whether a mortgage insurance program would in fact encourage private institutions to expand their farm lending operations is difficult to decide with any degree of confidence. A mortgage insurance program is based primarily on the assumption that private mortgage lenders are not involved in any significant way in the farm loans because of the risks involved. If this is correct, a government sponsored mortgage insurance program could have considerable merit. On the other hand, if other factors such as relatively high administration costs in agriculture or more lucrative alternatives in other industries are the main considerations influencing the commercial lending

institutions, it is doubtful if a mortgage insurance program would offer much inducement to private lenders to enter the agricultural lending business. It would appear that a mortgage insurance program could offer some inducement for the commercial banks to expand their farm mortgage lending operations primarily because such insured mortgages could be sold more readily to other institutional investors. The commercial banks are in a good position to deal with individual farmers but they may not wish to hold any significant quantities of farm mortgages for a long-run period of time.

ALTERNATIVE THREE

NATIONAL CO-OPERATIVE CREDIT SYSTEM

It was pointed out earlier that two different credit policies would be required to meet the financial needs of agriculture—one credit policy aimed at the capital requirements of viable or potentially viable commercial farmers, and another policy specifically designed for the low-income or sub-commercial group of farmers.

If \$5,000 worth of products sold is taken as the dividing line between the two groups of farmers, approximately 192,000 farmers (in terms of the 1966 Census) would qualify under the commercial credit policy.¹¹ Of the 238,634 farmers selling less than \$5,000 worth of products, not all would necessarily be interested in, or qualified for, what we refer to later as rural development credit. It is safe to assume, however, that there are many farmers who need credit but who do not have the necessary management ability or the required initial equity to qualify for loans from the existing lending institutions.

The co-operative credit system which is outlined in some detail in Appendix A to this chapter would meet the credit requirements of these two general groups of farmers in Canada.

There would be two major organizations:

- (a) The Agricultural Co-operative Credit Organization
and
- (b) The Rural Development Credit Agency.

Both organizations would report directly to the Federal Government. The Agricultural Co-operative Credit organization would be primarily concerned with the provision of credit to commercial farmers in Canada while the Rural Development Credit Agency would be designed to service the credit and management needs of low-income or sub-commercial farmers.

Provincial or regional boards would be identified with each of the provinces or with regions such as that of the four Atlantic Provinces. Local co-operative associations would be developed, and, over a period of years the whole co-operative credit system would become self-financing. This system has much to commend it in principle, particularly in the fact that farmers themselves would assume responsibility for the provision of credit. However, the Task Force is of the opinion that with all the other changes necessary in

¹¹ Many would argue that the line should be drawn at a point where the value of products sold per farm is \$10,000. In 1966, approximately 95,000 sold more than \$10,000 worth of products.

agriculture at this time, it would be unwise to launch such a different kind of credit program in the near future. It does have merit for future consideration, and we suggest certain principles and structures (see Appendix A).

ALTERNATIVE FOUR

FEDERAL-PROVINCIAL CREDIT SYSTEM

In view of the fact that both the Federal and provincial governments are involved in extending long-term mortgage credit to farmers in Canada, the establishment of a joint federal-provincial farm mortgage credit system offers many possibilities. The major advantages of such a system would be:

1. It would eliminate the duplication of services between the federal and provincial farm credit agencies.
2. It would recognize the traditional responsibility of the provinces for the provision of extension and farm management programs which are closely associated with farm credit policies.
3. It would permit the Federal Government, which has the fiscal capacity to mobilize the necessary funds, to help provide the provinces with the necessary capital resources for the operation of a farm mortgage credit program.
4. It would permit the development of a national farm credit system and at the same time provide sufficient flexibility for the provinces to adapt the credit system to their individual needs and circumstances.
5. It would recognize the joint constitutional and jurisdictional responsibilities of the Federal and the provincial governments for the agricultural industry.

The parallel for the proposed federal-provincial credit system exists, in many respects, in the current crop insurance program. Under the crop insurance policy, the provinces are responsible for the administration of the program and they provide one-half of the administrative costs associated with the operations of the program. The Federal Government contributes 25 per cent of the crop insurance premiums, one-half of the administrative costs and acts as the ultimate insurer of the respective provincial programs under an arrangement where the provinces pay an annual reinsurance premium to the Federal Government.

Under a joint federal-provincial farm mortgage credit system, one possible arrangement would be to have the Federal Government provide the necessary capital funds for the system and one-half of the administrative costs of the program. The provinces, accordingly, would be responsible for the remainder of the administrative costs and would be primarily responsible for the administration of the program. The overall policy, operating guidelines and administrative procedures could be developed jointly by the Federal and provincial governments.

A variation of the proposed system would have the provinces share equally with the Federal Government in providing capital funds for the program.

In 1967 the amount of long-term credit extended by the Federal Farm Credit Corporation amounted to \$251 million and that under the Veterans' Land Act to another \$31 million. During the same year, the provincial agricultural credit agencies extended \$64 million to farmers in Canada. Thus the Federal Government provided approximately 82 per cent of the total credit extended to farmers from both federal and provincial credit agencies.

A reasonable arrangement might be to have the Federal Government provide 75 per cent of the necessary capital funds and pay one-half of the administration costs of the proposed joint federal-provincial credit system while each of the provinces would be responsible for the remainder of the necessary capital funds and the administrative costs involved.

If the proposed federal-provincial credit system were adopted, there would be relatively little change required in the existing credit structures. Most of the present provincial credit institutions could be used with necessary modifications to fit into the proposed system. The present Farm Credit Corporation could be suitably modified to serve the federal aspects of the joint program. Presumably, a proportion of the present staff of the Farm Credit Corporation could be transferred to the respective provincial credit institutions with the remainder employed by the Federal Government for administrative and other purposes.

The above proposals deal with the provision of credit for commercial, viable farms; there remains the question of credit for small, low income, low technology farms. We have emphasized elsewhere that one policy cannot be expected always to be satisfactory both for commercial farms and for those which require special help. Nevertheless, duplication must be avoided if possible and the commercial and non-commercial program co-ordinated.

The most desirable course seems to be that of creating a Rural Development Credit Agency responsible to the Federal-Provincial Agricultural Credit Board. The Agency would therefore be a federal-provincial body fairly similar to that proposed in Appendix A (relating to the alternative of Co-operative Credit). The Task Force recognizes that there are already ARDA and FRED programs and projects, as well as other activities of the Department of Regional Economic Expansion, and other federal and provincial bodies. It is important to avoid duplication and fragmentation. Thus under the Rural Development Credit Agency proposed by the Task Force would come joint federal-provincial reviews of existing programs especially insofar as they relate to farm credit, with the Agency attempting to co-ordinate and to fill gaps in existing programs. Farmers who receive credit under an Agency program would be expected to graduate to the commercial program of the Federal-Provincial Agricultural Credit Board when their business operations and management skills had been developed sufficiently.

RECOMMENDATIONS

1. A Federal-Provincial Agricultural Credit Board should be created, with membership from, and responsibility to the Federal and provincial governments. Participants in the Board on behalf of the Federal Government should be responsible to the Minister of Agricultural Industry. (See Chapter 11)

2. The Board should develop and take responsibility for a joint federal-provincial credit system for commercial farmers. Under this system the Federal Government would provide 75 per cent of the required capital funds and pay one-half of the administration costs; the provinces should provide the remaining 25 per cent of the required capital funds and pay one-half of the administration costs. The provincial governments should be directly responsible for the administration of the proposed credit programs and the respective provinces should guarantee one-half of any capital losses incurred by the Federal government in the operation of the credit program in that province. The overall policy, operating guidelines and administrative procedures should be developed jointly by the Federal and provincial governments. The existing federal and provincial credit institutions should be modified as necessary and incorporated into the proposed joint Federal-provincial credit system.

3. The Federal-Provincial Agricultural Credit Board should proceed to develop an insured mortgage credit program with the objective of inducing commercial lending institutions to enter the farm credit field.

4. The joint Federal-Provincial Agricultural Credit Board should assume the responsibility for the development of a "guarantee against loss" type of lending program such as that which now exists under the Farm Improvement Loans Act.

5. The administration and responsibility for the Veterans' Land Act credit program should be transferred to, and merged with, the proposed joint Federal-Provincial Agricultural Credit Board.

6. The Farm Improvement Loans Act should be discontinued and the functions now performed by the F.I.L.A. transferred to, and become the responsibility of, the proposed Federal-Provincial Agricultural Credit Board.

7. The commercial banks should continue to be primarily responsible for the provision of operating credit to farmers and the banks should:

- (a) develop strong agricultural departments,
- (b) place a greater emphasis on "farm management loans" as opposed to the traditional "security" approach to farm lending,
- (c) integrate as closely as possible with government mortgage credit programs,
- (d) establish closer links with farm management extension agencies.

8. Agricultural extension departments should provide continuing short courses for farmers on topics relating to the use and management of credit.

9. The proposed CANFARM (i.e. electronic data processing of farm records) program should be instituted and developed as rapidly as possible.

10. Insofar as possible governments should avoid the subsidization of interest rates. If, for a special reason, interest rates are to be subsidized, the loaning agency should attempt to ensure that there is no direct or adverse effect on the commercial lending institutions involved in the field of farm credit. If subsidized interest rates are used, the cost of the subsidy should be borne entirely by the respective provinces.

11. Governments, both Federal and Provincial, should press for all interest charges to be expressed as simple interest rates.

12. As a special subsidiary to the Federal-Provincial Agricultural Credit Board, a Rural Development Credit Agency should be created. The Agency's attention should be devoted entirely to providing credit to non-commercial low-income farmers. Its operation should be flexible—in some cases coordinating, in others filling gaps—in order to ensure that there is a minimum of duplication and omission among existing programs relating to the poverty sector in agriculture. The Agency should count as its successes, those loans and assistance which result in a farmer graduating to commercial credit terms.

APPENDIX A

NATIONAL CO-OPERATIVE CREDIT SYSTEM

The following description of a possible Co-operative Credit System in Canada is presented in order to promote a better understanding of how such a system would function. While this system operates in the United States, it is unknown in Canada and unfamiliar to most Canadians. For this reason the Task Force has gone into some detail in this Appendix to indicate how such a system might be adapted to Canadian conditions.

Now let us examine the various components of the proposed system. There would be two main organizations: The Agricultural Co-operative Credit Organization and The Rural Development Credit Agency (See Figure 1).

The Agricultural Co-operative Credit Organization

The Agricultural Co-operative Credit Board would be comprised of seven regional or provincial representatives appointed by the Federal Government from among persons nominated by the provincial or regional boards, plus two additional members at large appointed by the Federal Government. The Board's primary responsibility would be to develop policies for the commercial sector of the agricultural industry.

The province or region would be divided into appropriate credit areas—a local co-operative credit office would be located in each credit area. The local office would have a credit manager and field staff qualified to carry out loan appraisals and to undertake all responsibilities relating to the operations and activities of the local credit association. In addition, it would be feasible to have a local co-operative credit committee whose job it would be to assist the credit manager in screening applications for loans.

The provincial or regional agricultural co-operative credit board would be established as follows:

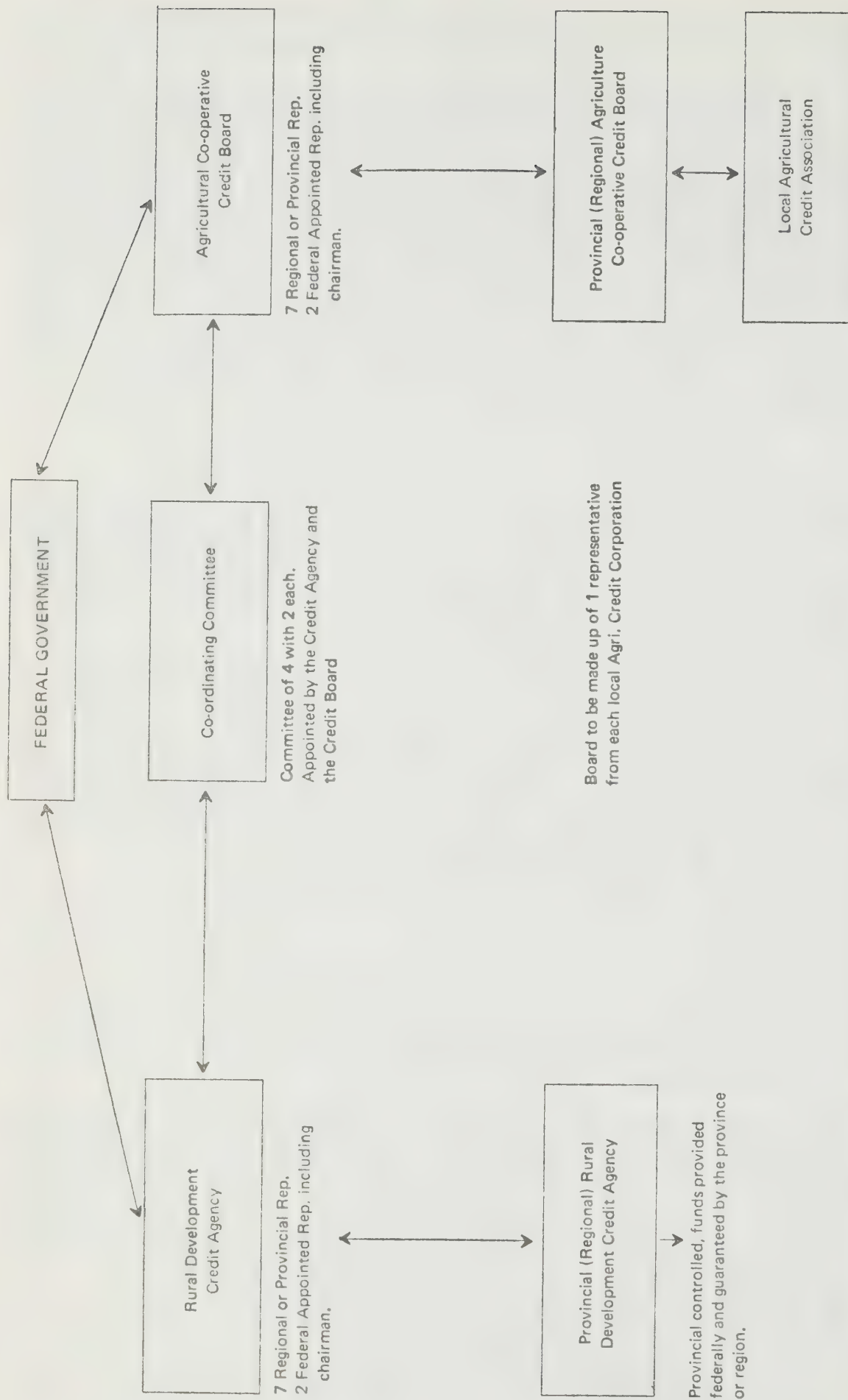
- (a) one elected representative from each of the local co-operative credit associations.
- (b) four associate-directors appointed by the respective province or region—the associate directors would act in an advisory capacity and would not have a vote on the board.

Each borrower from the Agricultural Co-operative Credit Organization would be expected to buy a share in the organization equal to 5 per cent of the value of his loan. This would be known as Class B stock. Should a borrower pay out his loan and retain his stock then after two years his stock would revert to Class A stock which would not have voting privileges but would have the same rights to dividends as the Class B stock.

The interest rate would be set at a level sufficient to cover:

- (i) the cost of loan money,
- (ii) the operating costs of the organization,
- (iii) reserve for losses,
- (iv) provide a margin for earnings.

FIGURE 1 PROPOSED AGRICULTURAL CREDIT SYSTEM FOR CANADA



1. A Chairman appointed by the provincial or regional government.
2. Four members appointed by the province or region.
3. Four members appointed by the Federal Government.

The funds required by the organization for loaning purposes would be raised through a fiscal agent appointed by the Federal Government to act on behalf of the Agricultural Co-operative Credit Organization.

It is assumed that capital stock required by the organization would be provided in the initial stages by the Federal Government. Once the associations build up their own reserves, the organization would begin to retire the government capital stock. A definite repayment schedule would be set up to allow the organization to repay all government funds borrowed and would at the end of some specified period become an independent agency.

Establishment of the proposed credit system would eliminate the need for the Federal Farm Credit Corporation and the provincial farm credit institutions as such. However, the present staff of the Federal Farm Credit Corporation and the provincial credit institutions possess the type of training and experience required by the proposed Agricultural Co-operative Credit system and the Rural Development Credit Agency. Not only that, but because of their very nature and past operational experience, the Federal Farm Credit Corporation and the provincial farm credit institutions could be readily adapted to, or absorbed into, the proposed new credit system.

The local co-operative credit associations would present an excellent vehicle for the granting and administration of loans, the provincial (or regional) programs among the commercial farmers. The provincial government extension agencies would have a natural focus for their farm management extension programs.

While the local co-operative credit associations would be directly responsible for the granting and administration of loans, the provincial (or regional) credit boards would be responsible for the development of policy, regulations and operating guidelines (e.g. loan limits, loan-to-security ratios, etc.) for the local co-operative credit associations. The provincial or regional credit policies would of course, be consistent with national policies and guidelines set by the Agricultural Co-operative Credit Board.

The Rural Development Credit Agency

The proposed Rural Development Credit Agency would focus on the credit and management needs of low-income or sub-commercial farmers. The Agency should be developed and operated under a joint federal-provincial arrangement whereby the Federal Government would supply the loanable funds and pay half the operating expenses. The province (region) would guarantee 100 per cent of any losses incurred and would pay half the operating expenses.

The administration and lending operations of the Agency would be the responsibility of the respective provinces or regions involved.

Seven provincial or regional credit agencies would be established under the proposed Rural Development Credit Agency. The Rural Development Credit Agency itself would be comprised of:

- (a) seven members appointed by the Federal Government from among representatives nominated by the respective provincial or regional agencies,

- (b) two members at large appointed by the Federal Government, one of whom would be designated as chairman of the Credit Agency.

The Agency would report directly to the Federal Government.

The respective provincial or regional agencies would be comprised of the following:

- (a) a chairman appointed by the province or region,
- (b) three members appointed by the province or region,
- (c) three members appointed by the Federal Government.

The provinces or regions would maintain close liaison with each other and the Federal Government through the national Agency. Policies applicable to the particular province or region would be developed by the respective provincial or regional credit agency.¹

The primary objective of the Rural Development Credit Agency would be to develop a credit system which would supply credit on suitable terms and conditions to small and low-income farmers who have no other source of adequate financing available to them. Both long-term and production credit would be made available to farmers qualifying for loans under the Agency.

The program must be co-ordinated with other policies designed to develop and rationalize the structure of agriculture and rural services. The program should be designed explicitly to assist those who have the potential to do so, to improve their farm business and their net income, by making possible the exploitation of every potential source of income available and to provide the means through which such persons could improve their skills and technical ability. This could include part-time farming.

It should be emphasized that credit alone will not accomplish the above objective, but credit is an indispensable part of the package of policies required for the development of low-income farmers and rural areas.

In order that the long-term objectives of the program could be met and the program kept under control, the borrowers would need to be willing to provide extraordinary security for these extraordinary services. For example, the agency might require an option to purchase the land upon the retirement of the borrower (in addition to the mortgage) so that small uneconomic units could not continue as such. The loan contract could require a specific level of performance on the part of the borrower. In providing loans to farmers, intensive pre-loan and post-loan management advisory services would be a required part of the credit policy.

The selection, training and development of staff—and the development of management and supervisory philosophy—required to implement and administer such a program would necessarily be different from that of an agency developed for the specific purpose of supplying credit to commercial farmers on commercial terms. Nevertheless, both the Agricultural Co-operative Credit Board and the Rural Development Credit Agency would have much to learn from each other. There would be a need for a high degree of co-ordination between the two agencies, which should be promoted by the Co-ordinating Committee, given a central plan in Figure 1. Many of the farmers who

¹ It should be noted that this arrangement has worked very well for crop insurance and there appears to be no reason why it would not apply equally well to credit.

originally received credit under the Rural Development Credit Agency *would be expected to graduate to the Agricultural Co-operative Credit System once their business operations and management skills were developed sufficiently to qualify for commercial status.*

The provincial government extension and ARDA-FRED agencies would also have the opportunity to make an effective use of credit as an instrument for farm development programs. Intensive management training programs and supervision could be provided along with the necessary credit to the low-income or sub-commercial farm units. It is recommended that the interest rates charged by the Rural Development Credit Agency be set at the same level as that for the commercial credit system. If any element of subsidy is to be involved in this program, it should be in the form of management training programs and credit advisors who would work very closely with the farmers who obtained credit from the Rural Development Credit Agency.

It should be emphasized that a very close working relationship would need to be established between the proposed Rural Development Credit Agency and ARDA-FRED type programs. The Rural Development Credit Agency is designed to service the credit needs of the sub-commercial or low-income farmers. Appropriate changes would have to be made in the present ARDA-FRED legislation to permit the proposed Credit Agency to fulfill its role consistent with the general objectives and activities of the present ARDA-FRED type programs.

The Rural Development Credit program with its emphasis on the development of low-income farmers would complement the several manpower programs which have been developed to assist rural persons to move from agriculture to other occupations, e.g. mobility grants and job placement agencies.

APPENDIX B

STATISTICS RELEVANT TO AGRICULTURAL CREDIT IN CANADA

TABLE B. 1

Average Farm Size Measured in Acres, by Provinces and Canada

	1911		1931		1961		1966	
	Total Acres/ Farm	Improved Acres/ Farm	Total Acres/ Farm	Improved Acres/ Farm	Total Acres/ Farm	Improved Acres/ Farm	Total Acres/ Farm	Improved Acres/ Farm
Newfoundland.....	—	—	—	—	31	12	29	12
Prince Edward Island.....	85	54	93	60	131	79	146	90
Nova Scotia.....	100	24	109	21	178	40	193	50
New Brunswick.....	120	38	122	39	187	62	208	73
Quebec.....	104	55	127	66	148	82	161	95
Ontario.....	105	64	119	69	153	99	162	109
Manitoba.....	279	155	279	157	420	276	480	313
Saskatchewan.....	296	125	408	246	686	459	763	530
Alberta.....	287	72	400	182	645	345	706	392
British Columbia....	150	28	136	27	226	65	277	85
Canada.....	160	71	224	118	359	215	404	251

TABLE B. 2
Distribution of Farms According to Improved Acres 1966

Improved Acres/Farm	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Can.
	(Per Cent)										
Under 3 acres.....	31.0	1.4	7.2	3.7	1.1	2.7	2.0	.8	1.6	10.0	2.3
3- 9 acres.....	39.1	2.6	11.4	5.5	2.1	4.7	3.2	.6	1.7	23.4	3.9
10- 69 acres.....	27.2	40.9	57.9	52.4	34.6	27.0	9.7	2.2	7.0	41.5	20.7
70- 129 acres.....	1.9	36.3	16.1	24.4	40.7	35.2	10.6	4.9	9.9	10.2	22.0
130- 179 acres.....	.4	10.9	4.0	7.0	13.1	14.6	11.0	7.5	12.5	4.3	11.3
180- 239 acres.....	.1	4.6	2.0	3.6	5.5	8.5	9.7	6.1	9.5	2.7	7.1
240- 399 acres.....	.1	2.7	1.2	2.4	2.6	5.8	25.8	23.5	24.1	3.8	13.2
400- 599 acres.....	.1	.4	.2	.5	.3	.9	14.2	18.2	13.4	1.8	7.5
560- 759 acres.....	.1	.1	.2	.1	.1	.3	7.9	15.4	8.8	1.0	5.4
760-1,119 acres.....	—	.1	.1	.1	—	—	4.3	13.0	6.6	.6	4.1
1,120-1,599 acres.....	—	—	—	—	—	—	1.4	5.4	2.9	.3	1.7
1,600 acres and over.....	—	—	—	—	—	—	.5	2.4	2.0	.3	.9
Total %.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE B. 3
Capital Investment in Canadian Farms Classified by Province, 1961 and 1966

Province	1961				1966			
	No. of Farms		Aver. Capital/Farm		No. of Farms		Aver. Capital/Farm	
	Census	Commercial	Census	Commercial	Census	Commercial	Census	Commercial
Newfoundland.....	1,752	281	13,663	33,219	1,709	301	17,761	47,851
Prince Edward Island.....	7,335	2,886	13,128	19,951	6,357	3,328	20,233	28,813
Nova Scotia.....	12,518	3,016	11,199	23,373	9,621	2,867	17,061	32,450
New Brunswick.....	11,786	3,073	12,334	22,866	8,706	2,938	17,318	30,839
Quebec.....	95,777	38,927	16,925	24,202	80,294	41,961	23,548	31,084
Ontario.....	121,333	69,667	30,922	40,500	109,887	70,724	44,401	56,287
Manitoba.....	43,306	24,286	26,839	37,337	39,747	27,372	43,934	57,440
Saskatchewan.....	93,924	63,546	30,472	37,984	85,686	69,962	57,109	65,424
Alberta.....	73,212	45,203	37,118	51,223	69,411	48,971	60,734	76,262
British Columbia.....	19,934	8,150	32,858	54,422	19,085	8,407	49,953	78,111
Canada.....	480,903	259,037	27,389	38,659	430,522	276,835	44,258	58,187

TABLE B. 4

Estimated Farm Credit Extended 1960 to 1967

Source and Term of Credit	Estimated Farm Credit Extended						Per cent of credit extended 1967	
	1960	1961	1962	1963	1964	1965		1966
								(per cent)
<i>Long term over (10 years)</i>								
Farm Credit Corporation.....	52.3	68.9	78.4	96.3	139.8	201.7	234.4	251.2
Veterans' Land Act.....	19.4	15.2	15.7	18.2	15.9	21.1	33.6	31.3
Provincial government agencies.....	37.0	38.1	39.0	40.4	49.4	47.8	51.4	63.6
Private individuals.....	7.0	8.0	8.0	9.0	10.0	11.0	12.0	16.0
Insurance, trust and loan companies.....	3.0	4.0	5.0	6.0	7.0	8.0	10.0	13.0
Treasury Branches (Alberta).....	1.6	1.6	1.4	1.2	0.3	0.6	0.8	0.0
Railway and land companies.....	0.4	0.4	0.2					
Total long term.....	120.7	136.2	147.7	171.1	222.4	290.2	342.2	375.9
								17.1
<i>Intermediate term (18 months to 10 years)</i>								
Banks (FILA).....	101.9	108.1	118.1	136.0	150.8	202.7	212.8	203.7
Private individuals.....	75.0	78.0	79.0	85.0	95.0	108.0	120.0	134.0
Supply company finance.....	29.0	27.0	28.0	30.0	32.0	34.0	38.0	43.0
Insurance, trust and loan companies.....	0.5	1.0	2.0	2.0	3.0	3.0	4.0	4.0
Industrial Development Bank.....		0.2	0.4	4.8	5.9	7.1	6.9	6.1
Credit Unions.....	4.0	7.0	20.0	37.0	51.0	61.0	74.0	90.0
Municipal (Ontario T.D.A.).....	1.3	1.3	1.4	1.6	1.9	1.8	2.2	2.5
Finance companies (cars and trucks).....	8.0	9.0	11.0	12.0	14.0	15.0	15.0	16.0
Treasury Branches (Alberta).....	0.3	0.3	0.4	0.2	0.3			
Sedco (Saskatchewan).....					0.1	0.4	0.5	1.0
Total intermediate term.....	220.0	231.9	260.3	308.6	354.0	433.0	473.4	500.3
								0.0
								23.0
<i>Short term (up to 18 months)</i>								
Banks (non FILA).....	302.0	363.0	428.0	491.0	541.0	574.0	618.0	733.0
Supply company finance.....	237.0	245.0	256.0	271.0	287.0	307.0	311.0	348.0
Credit Unions.....	51.0	63.0	72.0	75.0	75.0	72.0	70.0	69.0
Finance companies (household and personal).....	6.0	8.0	9.0	10.0	12.0	13.0	14.0	15.0
Dealers, stores, etc.....	25.0	24.0	22.5	21.0	19.5	18.0	19.5	15.0
Private individuals.....	55.0	62.0	71.0	77.0	85.0	90.0	95.0	110.0
Treasury Branches (Alberta).....	8.0	9.5	12.0	14.2	12.5	13.5	12.7	13.1
Total short term.....	684.0	774.5	870.5	959.2	1,032.0	1,087.5	1,140.2	1,303.1
								59.8
Total all credit.....	1,024.7	1,142.6	1,278.5	1,438.9	1,608.4	1,810.7	1,955.8	2,179.3
								99.9

¹PreliminarySOURCE: R. S. Rust, Farm Credit Reviewed, *Canadian Farm Economics*, Vol. 3, No. 4, October 1968.

TABLE B. 5
Estimated Farm Credit Outstanding 1960 to 1967

Source and Term of Credit	Estimated Farm Credit Outstanding							Estimated interest charge 1967	Estimated average interest rate	Out-standing as a per cent of 1967 total	
	1960	1961	1962	1963	1964	1965	1966				1967
(millions of dollars)											
<i>Long term (over 10 years)</i>											
Farm Credit Corporation	158.4	212.1	270.3	341.2	443.6	586.4	748.5	915.8	47.6	5.2	23.7
Veterans' Land Act	91.2	96.6	102.8	110.8	114.6	124.4	147.3	172.3	8.6	5.0	4.5
Provincial government agencies	160.0	182.7	204.0	228.3	254.0	275.9	302.2	332.3	12.6	3.8	8.6
Private individuals	31.0	33.0	34.0	36.0	40.0	45.0	61.0	65.0	3.3	5.1	1.7
Insurance, trust and loan companies	12.0	15.0	19.0	25.0	30.0	38.0	50.0	56.0	4.5	8.0	1.5
Treasury Branches (Alberta)	1.2	1.3	1.3	1.3	0.9	1.3	0.7	0.9	0.1	7.0	—
Railway and land companies	1.6	1.3	0.9	0.6	0.1						
Total long term	455.4	542.0	632.3	743.2	883.2	1,071.0	1,309.7	1,542.3	76.7	5.0	40.0
<i>Intermediate term (18 months to 10 years)</i>											
Banks (FILA)	178.1	193.8	212.6	241.3	273.1	340.9	399.1	432.6	21.6	5.0	11.2
Private individuals	300.0	312.0	319.0	342.0	382.0	432.0	483.0	538.0	27.4	5.1	13.9
Supply company finance	78.0	81.0	85.0	91.0	96.0	104.0	116.0	131.0	23.6	10.0	3.4
Insurance, trust and loan companies	4.0	5.0	7.0	7.0	10.0	12.0	16.0	19.0	1.6	8.5	0.5
Industrial Development Bank		0.2	4.2	8.0	12.0	18.0	20.0	22.0	1.7	7.7	0.6
Credit Unions	5.0	15.0	37.0	61.0	84.0	91.0	103.0	120.0	10.8	9.0	3.1
Municipal (Ontario T.D.A.)	4.2	4.9	5.6	6.4	7.4	8.1	9.0	10.0	0.4	4.0	0.3
Finance companies (cars and trucks)	10.0	12.0	14.0	16.0	18.0	20.0	20.0	23.0	2.8	12.0	0.6
Treasury Branches (Alberta)	0.4	0.6	0.4	0.2	0.3	1.7	1.4	1.9	0.1	6.0	—
Sedco (Saskatchewan)					0.1	0.4	0.6	1.3	0.1	7.5	—
Total intermediate term	579.7	624.5	684.8	772.9	882.9	1,028.1	1,168.1	1,298.8	90.1	6.9	33.6

TABLE B. 5 (Concluded)
Estimated Farm Credit Outstanding 1960 to 1967 (Concluded)

Source and Term of Credit	Estimated Farm Credit Outstanding						Estimated interest charge 1967	Estimated average interest rate	Out- standing as a per cent of 1967 total	
	1960	1961	1962	1963	1964	1965				1966
	(millions of dollars)						(per cent)			
<i>Short term (up to 18 months)</i>										
Banks (non FILA).....	241.5	290.7	343.4	392.7	433.0	459.5	494.7	586.6	44.0	15.2
Supply company finance.....	178.0	184.0	192.0	203.0	215.0	230.0	243.0	261.0	31.3	6.8
Credit Unions.....	39.0	55.0	58.0	60.0	60.0	58.0	56.0	55.0	5.5	1.4
Finance companies (household and personal)...	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	1.9	0.3
Dealers (stores, etc.).....	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.0	0.4	0.1
Private individuals.....	44.0	50.0	57.0	63.0	68.0	72.0	76.0	88.0	5.3	2.3
Treasury Branches (Alberta).....	6.0	6.3	8.0	10.1	9.3	11.0	9.6	9.0	0.7	0.2
Unpaid taxes ³	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2	0.2	0.1
Total short term.....	523.8	601.9	674.8	745.8	802.8	848.6	897.9	1,018.8	89.3	26.4
Total all credit.....	1,558.9	1,768.4	1,991.9	2,261.9	2,568.9	2,947.7	3,375.7	3,859.9	256.1	100.0

¹Preliminary.

²Reflects a shift during 1966 and 1967 to personal loans.

³Represents 1.5 per cent of total farm taxes. There is some question as to whether this item should be included.

SOURCE: R. S. Rust, Farm Credit Reviewed, *Canadian Farm Economics*, Vol. 3, No. 4, October 1968.

TABLE B. 6

Farm Credit Corporation: Loans Disbursed and Outstanding by Fiscal Years to March 31, 1967

Fiscal Year	Loans Disbursed		Cumulative Total of Loans Disbursed		Principal of Loans Outstanding End of Year	
	Number	Amount	Number	Amount	Number	Amount
		(dollars)		(dollars)		(dollars)
1929-1930	1,270	2,630,377	1,270	2,630,377	1,270	2,613,671
1930-1931	2,102	3,517,489	3,372	6,147,866	3,109	6,033,805
1931-1932	468	1,996,344	3,840	8,144,210	3,492	7,878,741
1932-1933	655	1,276,114	4,495	9,420,324	4,394	8,927,985
1933-1934	307	558,630	4,802	9,978,954	4,652	9,125,513
1934-1935	352	547,207	5,154	10,526,161	4,866	9,332,329
1935-1936	3,593	7,423,779	8,747	17,949,940	8,322	16,178,516
1936-1937	5,385	11,074,156	14,132	29,024,096	13,588	28,506,308
1937-1938	2,523	5,264,308	16,655	34,288,404	15,829	30,336,749
1938-1939	2,232	4,338,843	18,887	38,627,247	17,747	33,065,470
1939-1940	2,361	4,342,662	21,248	42,969,909	19,756	35,411,729
1940-1941	1,425	2,727,507	22,673	45,697,416	20,782	35,947,883
1941-1942	1,112	2,133,514	23,785	47,830,930	21,333	35,256,188
1942-1943	642	1,320,256	24,427	49,151,186	21,020	33,120,484
1943-1944	590	1,336,103	25,017	50,487,289	19,447	28,716,696
1944-1945	695	1,661,410	25,712	52,148,699	16,929	24,199,388
1945-1946	877	2,121,207	26,589	54,269,906	15,721	22,513,863
1946-1947	1,286	3,273,811	27,875	57,543,717	15,032	22,119,005
1947-1948	1,218	3,185,240	29,093	60,728,957	14,790	22,327,258
1948-1949	1,751	4,595,036	30,844	65,323,993	15,006	23,890,389
1949-1950	1,841	4,942,930	32,685	70,266,923	15,566	25,821,426
1950-1951	1,800	4,693,079	34,485	74,960,002	16,184	27,802,774
1951-1952	1,508	4,469,091	35,993	79,429,093	16,497	29,238,810
1952-1953	1,514	5,118,559	37,507	84,547,652	16,667	31,005,250
1953-1954	1,908	7,000,540	39,415	91,548,192	17,267	34,591,645
1954-1955	2,137	8,207,003	41,552	99,755,195	18,111	39,455,931
1955-1956	2,087	8,254,323	43,639	108,009,518	18,931	44,075,268
1956-1957	2,826	13,183,992	46,465	121,193,510	20,372	52,730,198
1957-1958	3,500	19,343,560	49,965	140,537,070	22,494	67,112,206
1958-1959	4,659	28,368,265	54,624	168,905,335	25,471	89,301,022
1959-1960	5,169	35,840,882	59,793	204,746,217	28,453	117,233,247
1960-1961	5,162	52,305,266	64,955	257,051,483	31,054	158,447,392
1961-1962	6,027	68,886,875	70,982	325,938,358	34,175	212,138,307
1962-1963	6,453	78,428,094	77,435	404,366,452	37,462	270,277,265
1963-1964	7,802	96,315,635	85,237	500,882,087	41,868	341,169,139
1964-1965	9,845	139,750,639	95,082	640,432,726	47,404	443,560,275
1965-1966	11,049	201,687,642	106,131	842,120,368	52,932	586,356,486
1966-1967	11,632	234,447,269	117,763	1,076,567,637	58,258	748,532,844

SOURCE: 1966-67 Annual Report, Farm Credit Corporation.

TABLE B. 7

Average Amount of Loan Disbursed by the Canadian Farm Loan Board (1929-30 to 1959)
and the Farm Credit Corporation (1959 to 1966-67)

Year	Average Amount of Loan Disbursed	Year	Average Amount of Loan Disbursed
	(dollars)		(dollars)
1929-30.....	2,071	1949-50	2,685
1930-31.....	1,673	1950-51	2,607
1931-32.....	4,266	1951-52	2,964
1932-33.....	1,948	1952-53	3,381
1933-34.....	1,820	1953-54	3,669
1934-35.....	1,555	1954-55	3,840
1935-36.....	2,066	1955-56	3,955
1936-37.....	2,056	1956-57	4,665
1937-38.....	2,086	1957-58	5,527
1938-39.....	1,944	1958-59	6,089
1939-40.....	1,839	1959-60	6,934
1940-41.....	1,914	1960-61	10,133
1941-42.....	1,919	1961-62	11,430
1942-43.....	2,056	1962-63	12,154
1943-44.....	2,265	1963-64	12,345
1944-45.....	2,390	1964-65	14,195
1945-46.....	2,419	1965-66	18,254
1946-47.....	2,546	1966-67	20,155
1948-49.....	2,624		

SOURCE: Calculated from data in the *1966-67 Annual Report*, Farm Credit Corporation.

TABLE B. 8

Distribution of Approved Loan Funds by Purpose, Farm Credit Corporation, Canada,
1959-60 to 1966-67

Year	Land Purchase	Improve- ments	Payment of Land- Secured Debt	Other Debts	Live- stock	Equip- ment	Sundry	Total
	(percent)							
1959-60.....	36.7	6.9	34.5	14.2	1.6	2.9	3.2	100.0
1960-61.....	53.8	6.1	25.4	9.3	2.5	1.5	1.4	100.0
1961-62.....	57.8	7.1	22.0	6.7	3.2	1.3	1.9	100.0
1962-63.....	55.5	8.5	23.2	7.1	3.1	1.2	1.4	100.0
1963-64.....	55.4	10.1	22.1	7.3	2.9	1.2	1.0	100.0
1964-65.....	54.5	11.7	18.1	10.3	2.9	1.2	1.3	100.0
1965-66.....	60.9	11.6	15.4	8.3	1.6	0.9	1.3	100.0
1966-67.....	61.2	13.9	13.5	7.2	1.3	1.1	1.8	100.0

The figures from 1964-65 to 1966-67 represent the percentage of *new* loan funds approved for each purpose.

The figures from 1959-60 to 1963-64 represent the percentage of *all* loan funds approved in the year for each purpose. That is, they include new loan funds plus old loans refinanced under new agreements.

TABLE B. 9
Farm Loans Disbursed by Canadian Farm Loan Board and Farm Credit Corporation, by Province, Canada, 1929-1967

Province	Canadian Farm Loan Board				Farm Credit Corporation				Total	
	Number of loans	Amount lent	%	Average Amount	Number of loans	Amount lent	%	Average Amount	Number of loans	Amount lent
British Columbia.....	2,699	8,751	4.8	3,242	2,782	52,954	4.5	19,034	5,481	61,706
Alberta.....	9,954	28,147	17.5	2,828	15,043	231,092	24.6	15,362	24,997	259,239
Saskatchewan.....	13,366	48,328	23.5	3,616	17,998	241,572	29.5	13,422	31,364	289,899
Manitoba.....	6,342	19,885	11.2	3,135	4,557	64,880	7.5	14,237	10,899	84,765
Prairie Provinces.....	29,662	96,360	52.2	3,249	37,598	537,544	61.6	14,297	67,260	633,903
Ontario.....	9,745	43,296	17.2	4,443	13,172	200,912	21.6	15,253	22,917	244,208
Quebec.....	9,173	22,455	16.1	2,448	5,469	80,414	9.0	14,704	14,642	102,869
New Brunswick.....	1,749	3,721	3.1	2,128	684	8,468	1.1	12,380	2,433	12,189
Nova Scotia.....	2,9	3,537	2.9	2,159	380	4,929	0.6	12,971	2,018	8,466
Prince Edward Island.....	2,094	5,041	3.7	2,407	896	7,785	1.5	8,689	2,990	12,826
Newfoundland.....	—	—	—	—	22	401	0.1	18,227	22	401
Atlantic Provinces.....	5,481	—	9.7	2,244	1,982	21,182	3.3	10,687	7,463	33,882
Canada.....	56,760	183,160	100.0	3,227	61,003	893,407	100.0	14,645	117,763	1,076,568
										100.0

SOURCE: 1966-67 Annual Report, Farm Credit Corporation.

TABLE B. 10

Veterans' Land Act: Number of New Loans and Additional Loans for Selected Years

Fiscal Year	Full-time farming			Part-time farming		
	New Loans	Additional Loans	Amount Disbursed	New Loans	Additional Loans	Amount Disbursed
	(number)	(number)	(\$ million)	(number)	(number)	(\$ million)
1943-47.....	13,094		58.6	11,285		42.6
1947-48.....	4,711		19.5	4,258		18.8
1952-53.....	1,002		5.0	3,103		14.8
1954-55.....	739	419	5.0	2,780		15.9
1960-61.....	313	1,925	16.7	1,786		13.8
1964-65.....	241	1,201	11.8	2,407	1,379	24.8
1966-67.....	269	2,044	25.8	4,140	2,690	52.1

SOURCE: Veterans' Land Act Administration

TABLE B. 11

Veterans' Land Act: Number of New Loans and Additional Loans, and Amount Disbursed to Full-Time and Part-Time Farmers, 1943 to 1966-67

Fiscal Year	Full-time Farming			Part-time Farming		
	New Loans	Additional Loans	Amount Disbursed	New Loans	Additional Loans	Amount Disbursed
	(number)		(dollars)	(number)		(dollars)
1943 to Mar. 31, 1947	13,094		58,647,971	11,285		42,591,989
1947-48.....	4,711		19,532,597	4,258		13,760,229
1948-49.....	2,689		15,701,977	3,290		16,325,150
1949-50.....	2,032		11,278,639	3,318		17,468,680
1950-51.....	1,261		7,112,170	3,102		16,551,122
1951-52.....	1,009		5,795,996	2,750		15,481,804
1952-53.....	1,002		4,979,452	3,103		14,834,258
1953-54.....	796		4,802,338	3,160		15,412,766
1954-55.....	739	419	5,020,934	2,780		15,900,110
1955-56.....	580	709	5,149,627	2,555		14,983,917
1956-57.....	471	698	4,889,063	1,849		11,990,244
1957-58.....	403	731	5,011,862	1,670		10,309,873
1958-59.....	443	830	5,359,000	1,666		10,319,260
1959-60.....	321	710	6,748,619	1,819		11,773,614
1960-61.....	313	1,925	16,668,856	1,786		13,853,806
1961-62.....	284	1,067	11,764,611	2,292		16,280,135
1962-63.....	263	1,118	10,593,644	2,994	1,731	25,599,192
1963-64.....	248	1,268	12,393,715	2,633	1,874	29,160,773
1964-65.....	241	1,201	10,966,374	2,407	1,379	24,782,688
1965-66.....	261	1,564	14,976,238	2,763	1,998	30,825,052
1966-67.....	269	2,044	25,774,772	4,140	2,690	52,071,394

SOURCE: Veterans' Land Act Administration.

TABLE B. 12
Veterans' Land Act: Conditional Grants and Estimated Administration Costs of Loans to Full-Time Farmers, 1964-65, 1965-66, 1966-67

	1964-65			1965-66			1966-67		
	Conditional Grants	Adminis- tration	Total	Conditional Grants	Adminis- tration	Total	Conditional Grants	Adminis- tration	Total
British Columbia.....	112,888	38,648	151,536	112,001	37,642	149,643	59,324	42,628	101,952
Alberta.....	297,455	320,211	617,666	251,132	314,191	565,323	205,527	388,125	593,652
Saskatchewan.....	553,818	385,488	939,306	319,547	365,891	685,438	368,669	439,367	808,036
Manitoba.....	306,282	179,852	486,134	149,138	197,166	346,304	146,402	207,838	354,240
Ontario.....	369,093	135,606	504,699	343,329	127,688	471,017	215,248	116,168	331,416
Quebec.....	26,337	16,767	43,104	27,226	19,791	47,017	33,694	11,648	45,342
Atlantic Region.....	73,912	35,319	109,231	78,427	27,342	105,769	45,707	42,492	88,199
Head Office.....		139,572	139,572		141,065	141,065		144,556	144,556
Canada.....	1,739,785	1,251,463	2,991,248	1,280,800	1,230,776	2,511,576	1,074,571	1,392,822	2,467,393

SOURCE: Data on conditional grants supplied by V.L.A.
Administration costs estimated from data supplied by V.L.A.

TABLE B. 13

Farm Loans Made Under the Farm Improvement Loans Act, Canada and Provinces, 1945 to 1967

Year	British Columbia	Alberta	Saskatchewan	Manitoba	Prairie Provinces	Ontario	Quebec	New Brunswick	Nova Scotia	Prince Edward Island	Newfoundland	Atlantic Provinces	Canada
							(thousand dollars)						
1945 ¹	66.8	1,250.4	834.5	537.4	2,662.4	523.5	112.0	26.4	23.2	7.4		57.0	3,381.7
1946	343.7	3,388.1	3,140.2	1,397.5	7,925.8	1,369.4	146.6	34.5	55.6	4.9		95.0	9,880.6
1947	444.1	6,537.9	6,464.3	2,518.4	15,520.5	1,845.8	246.4	46.4	46.4	11.4		104.0	18,160.8
1948	747.3	10,634.4	10,505.5	4,532.3	25,672.2	2,260.0	447.4	85.6	72.6	46.0		204.2	29,331.1
1949	1,358.7	14,659.5	16,497.4	7,242.3	38,399.2	4,260.5	1,341.9	182.3	132.5	204.1		518.8	45,879.1
1950	1,710.0	18,508.7	22,557.4	8,264.0	49,330.1	8,043.8	3,097.2	358.8	274.9	605.5	.9	1,240.2	63,421.4
1951	2,070.5	23,240.8	27,876.9	11,370.8	62,488.5	12,178.5	6,125.6	696.8	619.7	1,144.3	2.4	2,463.2	85,326.2
1952	2,213.8	26,495.2	35,365.3	11,225.4	73,085.9	12,245.8	7,128.8	926.5	852.3	1,756.1	49.9	3,584.8	98,259.2
1953	2,605.4	26,207.4	33,309.5	10,639.2	70,156.1	12,971.3	8,722.2	926.0	945.9	1,497.6	68.3	3,437.7	97,892.8
1954	2,285.8	15,055.4	14,960.4	6,375.4	36,391.2	12,380.6	8,434.6	720.0	866.2	922.2	73.0	2,581.5	62,073.8
1955	2,462.4	16,629.0	16,585.6	6,875.1	40,089.7	13,647.6	9,812.2	922.9	998.9	1,106.1	45.8	3,073.7	69,105.5
1956	2,128.8	16,109.1	18,485.0	7,732.8	42,326.9	12,631.6	10,961.0	815.2	893.3	990.2	72.3	2,771.0	70,819.3
1957	1,990.2	16,923.7	15,857.0	7,104.4	39,885.1	13,043.0	11,862.4	588.2	852.8	1,047.5	58.6	2,647.1	69,427.9
1958	2,653.2	21,793.1	19,766.5	8,876.2	50,435.8	17,735.2	16,442.7	946.6	989.5	1,265.0	71.8	3,272.8	90,539.7
1959	3,091.3	24,584.3	23,506.8	10,425.6	58,516.6	19,110.0	14,677.6	865.6	1,046.1	1,065.6	54.7	3,032.0	98,427.5
1960	2,865.7	24,637.4	28,222.4	11,010.9	63,870.7	18,737.2	13,019.9	1,022.9	858.1	1,407.8	73.6	3,362.4	101,855.7
1961	4,109.6	28,519.7	21,302.3	9,545.1	59,367.1	22,902.0	18,101.1	1,086.6	1,072.1	1,412.1	96.4	3,667.3	108,147.2
1962	4,368.8	34,886.4	31,828.5	15,036.5	81,751.4	23,436.2	5,515.9	790.3	986.3	1,180.6	59.8	3,016.9	118,089.2
1963	4,465.0	37,763.1	41,639.2	16,877.1	96,279.3	26,472.2	5,598.7	848.5	864.7	1,348.5	77.7	3,039.4	135,954.6
1964	4,967.6	42,187.5	45,165.1	19,982.9	107,335.6	29,149.9	5,840.0	1,000.7	1,011.7	1,467.7	63.2	3,543.3	150,836.3
1965	6,406.5	58,634.7	64,149.3	25,533.3	148,317.3	38,324.2	4,862.0	1,539.1	1,127.6	2,082.8	47.5	4,797.0	202,706.9
1966	7,542.7	63,160.1	68,084.1	26,623.2	157,867.4	41,348.3	1,173.8	1,303.6	982.5	2,532.4	45.7	4,864.2	212,796.5
1967	7,571.8	65,256.6	58,802.3	23,634.3	155,265.0	42,915.9	1,079.2	980.4	1,146.9	2,242.3	35.0	4,404.7	203,664.9
Total 1945-67	68,489.8	597,062.5	624,905.4	253,360.3	1,482,899.9	387,532.6	154,749.2	16,814.1	16,719.5	25,348.2	996.5	59,878.2	2,145,977.9

¹The Farm Improvement Loans Act came into force March 1, 1945. 1945 figures refer to the 10 month period, March 1, 1945 to December 31, 1945.SOURCE: *Farm Improvement Loans Act, Annual Reports*, Department of Finance.

TABLE B. 14
Farm Improvement Loans Act, Loans by Provinces, 1945-1967

	Loans Made		Amount Lent		Average Size of Loans
	(number)	%	(dollars)	%	(dollars)
British Columbia.....	41,226	2.9	68,489,767	3.2	1,661
Alberta.....	395,845	27.9	597,060,485	27.9	1,508
Saskatchewan.....	410,023	28.9	624,906,021	29.1	1,524
Manitoba.....	172,424	12.1	253,360,300	11.8	1,469
Prairie Provinces.....	978,292	68.9	1,475,326,806	68.8	1,508
Ontario.....	239,296	16.9	387,534,068	18.0	1,619
Quebec.....	113,348	8.0	154,748,970	7.2	1,365
New Brunswick.....	11,893	0.8	16,814,076	0.8	1,414
Nova Scotia.....	13,863	1.0	16,719,454	0.8	1,206
Prince Edward Island.....	20,544	1.4	25,348,204	1.2	1,234
Newfoundland.....	631	0.1	996,516	0.0	1,579
Atlantic Provinces.....	46,931	3.3	59,878,250	2.8	1,276
Total.....	1,419,093	100.0	2,145,977,861	100.0	1,512

SOURCE: *Farm Improvement Loans Act, Annual Report 1967*, Department of Finance.

TABLE B. 15

Number and Average Size of Loans Made Under the Farm Improvement Loans Act, Canada,
1945 to 1967

Year	Loans Made	Average Size of Loan
	(number)	(dollars)
1945 ¹	4,311	784
1946.....	13,030	758
1947.....	22,046	824
1948.....	30,431	964
1949.....	44,775	1,025
1950.....	58,969	1,075
1951.....	75,063	1,137
1952.....	83,315	1,180
1953.....	83,962	1,166
1954.....	58,572	1,060
1955.....	60,755	1,137
1956.....	60,180	1,177
1957.....	57,988	1,199
1958.....	70,278	1,288
1959.....	71,143	1,384
1960.....	68,041	1,497
1961.....	70,615	1,531
1962.....	72,621	1,626
1963.....	77,373	1,757
1964.....	80,632	1,871
1965.....	91,191	2,223
1966.....	85,553	2,488
1967.....	78,249	2,602
Total.....	1,419,093	1,512

¹10 months only.

SOURCE: *Farm Improvement Loans Act, Annual Report 1967*, Department of Finance.

TABLE B. 16

Farm Improvement Loans Act, Loans by Purposes, 1945-1967

	Loans Made		Amount Lent	
	(number)	%	(dollars)	%
Purchase of agricultural implements.....	1,140,488	80.4	1,703,138,797	79.4
Construction, repair or alteration of or making additions to any building or structure on a farm..	109,006	7.7	235,096,363	10.9
Purchase of livestock.....	110,093	7.7	146,258,993	6.8
Other improvements.....	59,506	4.2	61,483,708	2.9
Total.....	1,419,093	100.0	2,145,977,861	100.0

SOURCE: *Farm Improvement Loans Act, Annual Report 1967*, Department of Finance.

TABLE B. 17
Farm Improvement Loans Act: Claims, Interest and Collection Costs Paid by the Federal Government
Under Terms of the Act, 1965, 1966, 1967 and Total 1945 to 1967

	1965			1966			1967			Total	
	Number	Amount	(dollars)	Number	Amount	(dollars)	Number	Amount	(dollars)	Number	Amount
British Columbia.....	7	9,867.99	(dollars)	8	8,766.86	(dollars)	10	13,814.86	(dollars)	91	100,441.55
Alberta.....	46	32,955.10		39	43,347.74		60	58,362.42		821	586,875.67
Saskatchewan.....	38	32,273.60		31	28,467.42		36	32,675.28		922	672,192.69
Manitoba.....	19	16,097.72		14	9,909.24		15	14,635.57		259	216,612.69
Ontario.....	34	31,608.78		61	77,586.72		60	66,610.64		505	432,204.80
Quebec.....	67	66,303.41		75	73,151.10		83	121,607.28		559	488,451.18
New Brunswick.....	9	8,220.55		5	1,638.06		2	1,121.60		62	44,304.40
Nova Scotia.....	1	253.06		2	375.15		5	10,380.73		51	35,920.96
Prince Edward Island.....	8	4,792.31		8	4,967.29		13	18,578.03		154	98,124.72
Newfoundland.....							1	1,607.15		8	6,878.45
Total.....	229	202,372.52		243	248,209.58		285	339,393.56		3,432	2,682,007.11

SOURCE: Department of Finance.

TABLE B. 18

Prairie Grain Advance Payments Act, Number and Amount of Advances and Cost to the Federal Government, 1957-58 to 1966-67

Year	No. of Applications	Total Advances	Average Advance	% Refunded	Cost to Government
		(\$ million)	\$	%	(\$ thousand)
1957-1958.....	50,412	35.2	698	99.9	
1958-1959.....	45,341	34.4	758	99.9	893
1959-1960.....	50,047	38.5	769	99.9	756
1960-1961.....	76,089	63.9	840	99.9	1,297
1961-1962.....	22,342	16.7	746	99.9	625
1962-1963.....	39,683	29.2	737	99.9	478
1963-1964.....	63,427	62.1	980	99.9	864
1964-1965.....	38,375	33.0	859	99.8	543
1965-1966.....	43,509	40.6	933	99.7	669
1966-1967.....		36.7		96.2	583

SOURCE: 1966-67 Annual Report of the Canadian Wheat Board.

TABLE B. 19

Industrial Development Bank: Number and Amount of Agricultural Loans, Fiscal Years Ending September 30, 1961 to 1967

Year	No. of Loans	Amount Lent	Average Size of Loan
		(\$ thousand)	\$
1961.....	11	242	22,000
1962.....	106	4,127	38,934
1963.....	175	4,809	27,480
1964.....	201	5,892	29,313
1965.....	205	7,118	34,722
1966.....	185	6,876	37,168
1967.....	169	6,121	36,219
Total.....	1,052	35,185	33,446

SOURCE: Annual Reports, Industrial Development Bank.

TABLE B. 20
Manitoba Agricultural Credit Corporation: Approved Loans by Purposes,
1959-60 to 1966-67

Purpose	Thousand dollars	Per cent
Purchase of land.....	30,734.4	74.4
Permanent improvements to buildings.....	2,232.9	5.4
Permanent improvements to land.....	159.9	.4
Removal of encumbrances and consolidation of debts.....	7,328.9	17.8
Purchase of livestock.....	514.1	1.2
Purchase of equipment.....	290.2	.7
Other purposes (includes beef cattle).....	28.1	.1
Total.....	41,288.5	100.0

SOURCE: *Annual Report of the Department of Agriculture and Conservation*, for the year ended March 31, 1967. p. 107.

TABLE B. 21
Manitoba Agricultural Credit Corporation: New Loans Approved 1959-60 to 1966-67

Year	New Loans Approved		
	Number	Total Amount	Average Size
		(dollars)	
1959-60.....	425	4,141,705	9,745
1960-61.....	533	5,922,286	11,111
1961-62.....	381	4,533,988	11,900
1962-63.....	298	3,622,113	12,155
1963-64.....	281	3,556,660	12,657
1964-65.....	283	4,055,410	12,796
1965-66.....	301	5,136,697	17,065
1966-67.....	281	5,218,382	18,571
Total.....	2,783	36,187,241	13,003

SOURCE: *Annual Reports of the Department of Agriculture and Conservation*.

TABLE B. 22

Manitoba Agricultural Credit Corporation: Approved Loans by Age Groups,
1959-60 to 1966-67

	Age Group		Beef Cattle Loans	Totals
	Less than 35 years	More than 34 years		
Number approved—net.....	1,628	1,160	4	2,792
Percentages.....	58.3	41.5	.2	100
Money approved..... \$	27,347,299	15,917,018	24,200	41,288,517
Percentages.....	61.4	38.6		100
Average loans..... \$	15,570	13,722	6,050	14,788

SOURCE: *Annual Report of the Department of Agriculture and Conservation*, for the year ended March 31, 1967. p. 107.

chapter fourteen

CROP INSURANCE

INTRODUCTION

Repeated attempts have been made by farmers in Canada since the early 1920's to obtain some form of systematic protection against the effects of highly variable and uncertain crop yields. A private insurance company was induced to enter the crop insurance business in Western Canada during the 1920's but after a short and costly experience withdrew from the field. This experience was followed by several studies of the feasibility of all-risk crop insurance and repeated attempts by prairie farmers to have the government enter the crop insurance business. In 1939, the Federal Government passed the Prairie Farm Assistance Act which was designed to relieve Prairie farmers from the full effects of highly variable and often extremely low crop yields. Twenty years later the Federal Crop Insurance Act was passed. Both the Prairie Farm Assistance Act and the Federal Crop Insurance Act are in operation at this date (December, 1969).

In no other industry is the risk of loss due to natural hazards as large or as unpredictable as in agriculture. Widespread crop losses in many parts of Canada, particularly in the Prairie Provinces, have created severe hardships not only for the farmers concerned but for entire rural communities. Between 1931 and 1937 as a result of a devastating drought and low farm prices total relief expenditures for the three Prairie Provinces amounted to nearly \$283 million, of which around \$100 million were contributed by the Federal Government. Since that time, public assistance has been provided on several occasions to farmers in all parts of Canada who have suffered the ravages of rust, drought, frost, excessive rainfall, hail and insects. The need for some form of systematic protection against widespread crop loss has been long recognised.

THE PRESENT SITUATION

1. *The Prairie Farm Assistance Act*

The Prairie Farm Assistance Act has been amended several times since its inception in 1939. The legislation provides for a levy of one per cent on all grains marketed through the Canadian Wheat Board to help cover indemnities paid to farmers under the program. Any deficits in the program are covered by monies transferred from the Federal Government. The basis for payment is the average yield of wheat in a given block or township. The basis for and the amount of the indemnity awarded to any given farmer within the designated township or block is as follows:

- (a) yield of 0 to 3 bushels per acre within the township or block \$4 per acre
- (b) yield of 3 to 5 bushels per acre \$3 per acre
- (c) yield of 5 to 8 bushels per acre \$2 per acre
- (d) yield of 8 to 12 bushels per acre 10 cents per acre for each cent, not exceeding 10, by which the average price is less than 80 cents per bushel.

The indemnity paid to an individual farmer applies to not more than half of the cultivated land up to a maximum of 200 acres, with a maximum payment of \$800.

During the period 1939 to 1968, the total levy collected under the Act amounted to approximately \$196 million and total indemnities paid amounted to nearly \$370 million (Table 1). In the case of Manitoba the levy almost equalled the payments made under the program; in the case of Saskatchewan and Alberta, the levy amounted to about 50 per cent of the total payments made. Since the introduction of the Prairie Farm Assistance Act in 1939, over 1.5 million awards have been made under the program.

TABLE 1
Prairie Farm Assistance Act; Levy Collected, Awards, and Total Payments 1939 to July 31, 1968

	Levy Collected	Total Payments	Number of Awards
	(dollars)	(dollars)	
Manitoba.....	26,747,000	30,430,000	162,000
Saskatchewan.....	115,254,000	233,975,000	873,000
Alberta.....	54,004,000	103,633,000	460,000
British Columbia.....	—	1,929,000	10,000
Unallocated.....	4,000	—	—
Total.....	196,009,000	369,967,000	1,505,000

2. *The Federal Government's Crop Insurance Act*

The Crop Insurance Act was passed in 1959. This Act provided enabling legislation to allow the provincial governments to establish crop insurance programs. The Act originally provided that the Federal Government could enter into an agreement with any province to contribute 50 per cent of the administrative costs and 20 per cent of the premiums necessary to operate crop insurance plans. In addition there was provision for federal loans to the province in years when indemnities exceeded the reserves available for paying claims.

In 1964, an amendment to the Act provided that, as an alternative to loans, the Federal Government might reinsure part of the provincial risk involved in an approved crop insurance program.

Further amendments were made to the Act in 1966 to allow more flexibility in the provisions of the crop insurance plans, in order to meet the needs of farmers across Canada who produce special crops and grains. These amendments included:

- (a) raising the limit of coverage from 60 per cent of the average yield to 80 per cent;
- (b) increasing the Federal Government's contribution to the individual farmer's premium from 20 to 25 per cent;
- (c) extending coverage to fruit trees and perennial plants and to summer fallow that could not be seeded because of wet conditions;
- (d) calculation of a farmer's coverage on the basis of average yield of the crop experienced either on his farm or on all farms in the area.

Since its inception in 1960, the number of farmers participating in the crop insurance program increased substantially. During the 1968-69 crop year, 64,376 farmers took out crop insurance valued in excess of \$188 million (Table 2). In 1969, eight provinces participated in the crop insurance program, with Nova Scotia introducing crop insurance for the first time.

TABLE 2
Data Relating to the Crop Insurance Act, Canada, 1967-68 and 1968-69

	1967-68	1968-69
Number of farmers insured.....	33,436	64,376
	(dollars)	(dollars)
Insurance coverage.....	91,247,351	188,192,000
Premiums charged.....	7,169,605	13,094,000
Indemnities paid.....	2,791,516	15,597,000
Administrative costs.....	1,443,972	3,501,918
Federal contributions		
(a) Quebec.....	—	1,200,000
(b) Other provinces.....	2,651,993	4,839,795
Federal re-insurance reserves.....	1,911,088	3,226,006

TABLE 3

The Crop Insurance Act—Number of Farmers Insured and Crop Coverage, by Province, 1968

Province ¹	No. of Farmers	Coverage	Total Premiums	Indemnities	Loss Ratio	
					1968-69	To Date
		(\$ thousand)	(\$ thousand)	(\$ thousand)		
P.E.I.....	152	375	29	44	1.52	2.28
Quebec.....	19,177	50,000	2,125	5,000	2.34	2.34
Ontario.....	1,861	3,391	279	318	1.14	1.41
Manitoba.....	14,481	36,600	3,200	2,250	.70	.58
Saskatchewan.....	12,343	27,000	2,350	1,645	.70	.44
Alberta.....	15,661	63,720	4,581	5,400	1.18	.83
British Columbia..	701	7,106	530	940	1.77	1.29
Total.....	64,376	188,192	13,094	15,597	1.19	.77

¹Nova Scotia introduced crop insurance legislation for the first time in 1969.

3. Provincial Participation

During the first year (1960) of the program, only Manitoba introduced crop insurance legislation. In that year 2,472 farmers purchased crop insurance.

The crop insurance program has since been introduced into seven other provinces. In 1968 the Province of Alberta had the largest insurance program with a coverage in excess of \$63 million.

The loss ratio under the crop insurance program in 1968 was highest in Quebec and lowest in Manitoba and Saskatchewan.

The all-risk crop insurance program is a splendid example of how the state and farmers of Canada have combined to provide a much needed program for the agricultural industry. Crop insurance provides the individual farmer with a systematic form of protection against highly variable crop yields and unpredictable crop losses. It provides substantial stability to the rural economy and eliminates the need for *ad hoc*, hastily conceived and costly emergency programs, to deal with widespread crop loss.

Crop insurance is an actuarially based program in which the premiums paid by farmers bear a close relationship to the risks involved and the level of coverage selected. In principle, the premium rates are calculated for each soil type and each crop in such a way that the total amount of the premium payments made should equal the indemnities paid out over a long-run period taking into account the Federal subsidy of 25 per cent of the premiums and the administration costs which are shared equally by the Federal and provincial governments. In any given year, the premium collected from the individual farmer may be more or less than the indemnity paid but eventually the total amount of the premiums collected should equal the total payments made

to the farmer. If persistent losses (or persistent gains) occur over a longer-run period of time, the crop insurance program should not be regarded as being actuarially sound.

The crop insurance program in Canada is based on the actuarial principle outlined above. To the extent, however, that the administrative costs of the program are shared equally by the Federal and respective provincial governments and the Federal Government contributes 25 per cent of the premiums involved, the insured farmers pay correspondingly less on their individual insurance premiums.

ASSESSMENT

It has become evident that the development of the crop insurance program, particularly in the Prairie Provinces, has made the Prairie Farm Assistance Act redundant. During the period 1939-67, the average annual subsidy paid to the P.F.A.A. program amounted to \$5.9 million and the average annual cost of administering the program has amounted to approximately \$635,000.

While the P.F.A.A. has helped to alleviate the effects of crop yield instability in Western Canada, it has several limitations, the most important of which are the following:

1. It is not sensitive enough to crop yield instability on the individual farm. The average wheat yield in a township is used as the basis for determining whether or not payments are to be made to all farmers in the township regardless of their individual yields.
2. The level of protection is completely inadequate relative to current crop production costs (i.e. the maximum per farm is \$800 in any one year regardless of losses incurred).
3. The basis for payment of benefits to farmers i.e. township or block, bears little correlation to soil type or crop yield.
4. It weighs heavily in favour of low-yield, sub-marginal farming areas—for example, some areas in the Prairie Provinces have received payments every year since the inception of the program in 1939 while other areas have never received any benefit from the program. This is the most serious criticism which can be made of any crop insurance program.

The introduction of a comprehensive, all-risk crop insurance program has made the Prairie Farm Assistance Act redundant.

The Task Force is satisfied that crop insurance provides a rational and systematic method of dealing with highly variable crop yields and unpredictable crop losses; it permits the individual farmer to protect himself against serious financial loss due to natural hazards over which he has little or no control.

In a more general sense, crop insurance reduces the impact of widespread crop losses on the rural economy. To this extent, most businesses connected with agriculture tend to benefit from the program.

The Task Force notes that the "loss ratio" for several provinces appears to be extremely high. It is obvious that the premium-indemnity ratio will vary substantially from year to year but the premiums should cover the indemnities over the longer run if the program is to remain a viable operation or if excessive subsidies are to be avoided. The crop insurance programs in those provinces showing heavy losses will need to be watched very closely during the next few years. If losses of the magnitude shown in Table 3 persist in particular provinces their premium rates should be revised upward to make the program actuarially sound.

RECOMMENDATIONS

The Task Force recommends the following:

1. The immediate discontinuance of the P.F.A.A. program;
2. The equivalent of the annual subsidy paid to the P.F.A.A. program by the Federal Government should be allocated to the financing of the Prairie Grain Price Stabilization Program (see Chapter 5);
3. An independent body should be appointed by the National Agricultural Advisory Council to evaluate the actuarial structure of the crop insurance program in Canada and make the results of such an evaluation known annually at the proposed national policy conference outlined elsewhere in this Report;
4. In 1975 a Federal-provincial committee should appoint an independent body to make a comprehensive evaluation of the effectiveness and efficiency of the crop insurance program and, in particular, to recommend on whether or not the current subsidy should be continued.

chapter fifteen

AGRICULTURAL RESEARCH

INTRODUCTION

Over the years agricultural research has contributed to the transformation of Canada from a predominantly rural to an industrialized urban society through the introduction of more efficient methods of food production. It has made possible the development of a large and complex industry involved in the processing and marketing of farm products and in the provision of a growing range of production inputs and services to farmers. It has brought large benefits to food consumers in the form of abundant supplies and favourable prices, placing Canadians among the best fed nations in the world.

During recent years, however, growing surpluses of some agricultural commodities have cast a shadow over the benefits of research. A question frequently encountered is this: why should we continue expenditures on agricultural research when we are unable to sell all that we can produce? This question must be answered before a more positive policy can be developed for agricultural research in the future.

There can be no doubt that agricultural surpluses tend to have a depressing effect on the adoption of results flowing forth from research. To argue, however, that agricultural research should be curtailed because of the surpluses is to miss the basic issue involved. It is the problem of surpluses which should be attacked, not research.

The basic reasons for the build-up of stocks in certain agricultural commodities in Canada have been dealt with at length in other sections of this Report. In the case of grains, and wheat in particular, several agricultural

policies and programs have led to the creation of costly and unwarranted stocks. These surpluses, in turn, have had the effect of discouraging the adoption of technological innovations and the more efficient use of resources in agriculture.

The Task Force has advocated elsewhere in this Report that Canadian farmers must be prepared and must be provided with the opportunity to compete more effectively in the international markets of the world. As long as Canadian farmers remain dependent on world markets for the disposal of a large part of their production, they cannot remain isolated from the changes which are taking place in the international economy. It is becoming very clear that Canadian agriculture will not have easy access to export markets in the future; these markets will be extremely competitive and will go generally to those countries which are prepared to compete on the basis of efficiency, notwithstanding tariffs, export subsidies and import quotas of various kinds.

Agricultural research can be a powerful tool in helping Canadian farmers compete more aggressively and more successfully in the markets of the world. Policies which prevent or discourage the use of research in this way will not only make it more difficult to meet international competition but, what is worse, Canadian farmers may find their markets in Canada being taken over to an increasing degree by foreign competitors.

PRESENT STATUS OF AGRICULTURAL RESEARCH

The Task Force did not undertake any comprehensive analysis of agricultural research in Canada. This topic has been the concern of a Special Study Group whose report is to be published in the near future.¹ However, the Task Force does wish to make certain observations and recommendations on research as it relates to the development of a more competitive position for Canadian agriculture in the export markets of the world.

During the course of its investigations, the Task Force encountered many serious gaps in information and data relating to the agricultural industry in Canada—gaps which had to be filled at considerable time and expense before the Task Force could proceed with its analysis and evaluation of agricultural policies in Canada.

In several instances, the Task Force found that certain research data relating to the Canadian agricultural industry could be obtained more readily from foreign sources, particularly the United States, than from sources within Canada.

The serious lack of research on many aspects of the Canadian agricultural industry was evident in many of the briefs and submissions made to the Task

¹ The Special Study Group on Agricultural Research was established in 1966 by the Science Secretariat, Government of Canada, to examine and report on all aspects of agricultural research in Canada. Its report will be published by the Science Council of Canada in early 1970.

Force during the earlier part of its investigations. Many recommendations presented to the Task Force were not supported with adequate research and analysis.

The Special Study Group on Agricultural Research² found that a total of \$74.7 million was spent on agricultural research in Canada in 1967 (Table 1). The Federal Government itself was by far the most important agency involved in this endeavor; of the total amount spent on agricultural research, 53 per cent was spent by the Federal Government. By contrast, only seven per cent of the total was spent by industry, compared with 50 per cent for private industry in the United States.³

TABLE 1
Total Expenditures on Agricultural Research and Development in Canada, 1967

	Expenditures	% of Total
	(\$ thousand)	
Federal Government.....	39,616	53.0
Provincial Governments.....	7,901	10.6
Industry.....	5,464	7.4
Total University.....	21,687	29.0
Grand Total.....	74,668	100%

It can hardly be said that the amount of funds allocated for agricultural research is excessive. The \$75 million spent on agricultural research in 1967 represented about 1.7 per cent of farm cash receipts or about 0.9 per cent of the total spent by Canadian food consumers. Expressed another way current government expenditures on storage programs for wheat are almost as large as the amount spent in support of agricultural research.

The Task Force supports the observations made by the U.S. National Advisory Commission on Food and Fibre:⁴

Cutting back research funds would not help settle the current excess capacity problem in any case. Many of the present production techniques were developed from ideas and projects done 25 years ago. The research now underway will appear in the techniques of 1985 or 2000. It would be dangerous to gamble that new technology would not be needed at the end of the century.

At the same time, the Task Force contends that serious questions can be raised about the emphasis (or lack of emphasis) which is being placed on

² The preliminary findings of the Special Study Group on Agricultural Research were made available to the Task Force during the Canadian Agriculture Congress held in Ottawa in March, 1969, in a document entitled *Agricultural Research and Development*.

³ See: Report of the National Advisory Commission on Food and Fibre, *Food and Fibre for the Future*. U.S. Gov't. Printing Office, Washington, D.C., 1967.

⁴ *Ibid.*, p. 269.

many facets of agricultural research in Canada. Continuous evaluation should be made of agricultural research to ensure that the funds made available are spent in areas which promise to yield the greatest benefits to society. Are the objectives of agricultural research in Canada clearly defined? Are the current priorities relating to the allocation of research funds fully justified? What criteria should be used in setting these priorities? Is there a proper balance among the various disciplinary components of the overall research system?⁵ Is there sufficient integration among the various research disciplines? Are the research institutions responsive to the changing needs of the agricultural industry?

These are only a few of the many questions which should be raised in any evaluation of agricultural research in Canada.

Approximately 82 per cent of the total funds allocated for agricultural research was spent on the natural sciences compared with 9.5 per cent in agricultural economics, seven per cent on agricultural engineering and one per cent on rural sociology (Table 2).

TABLE 2

Total Expenditures on Agricultural Research and Development by Discipline Areas, Canada, 1967

Disciplines	Expenditures	% of Total
	(\$ thousand)	
Natural Sciences.....	61,597	82.5
Agricultural Engineering.....	5,248	7.0
Agricultural Economics.....	7,086	9.5
Rural Sociology.....	737	1.0
Grand Total.....	74,668	100%

A detailed breakdown of the man-years of research effort for the various discipline groups is shown in Table 3. Of particular interest to the Task Force is the allocation of professional resources in the field of agricultural economics. A total of 98.8 man-years were devoted to research in this area of concern. Of this total, only 18.3 man-years, or about 1.2 per cent of the total man-years in all agricultural research, were devoted to research in marketing, distribution and international trade. Worse still, only 4.8 man-years of effort were available in the field of agricultural policy research, a topic of primary importance to the Task Force. It will also be noted that the equivalent of

⁵ See the *Challenge of Growth and Change*, Fifth Annual Review, Economic Council of Canada, page 95.

The Economic Council notes that 219 professional man-years of research were associated with horticultural crops in 1966 compared with only 113 man-years of research in cereal crops. During the same year, however, horticultural crops accounted for only ten per cent of Canada's total farm cash income while the cash income derived from the sale of cereal crops accounted for more than 25 per cent.

TABLE 3

Allocation of Professional Staff to Research by Disciplines (Man-Years) Canada, 1967

Discipline	Total Man-Years	% of Grand Total
<i>Natural Sciences</i>		
Plant Production.....	272.6	18.4
Animal Production.....	124.1	8.4
Plant Protection.....	273.3	18.5
Animal Protection.....	95.0	6.4
Soil, Water.....	124.2	8.4
Food Products.....	55.6	3.7
General.....	375.6	25.4
Sub-total.....	1,320.4	89.2
<i>Agricultural Engineering</i>		
Machinery.....	16.4	1.1
Power.....	1.1	0.1
Structures.....	3.8	0.3
Environmental Control.....	1.4	0.1
Crop, Food Processing.....	1.5	0.1
Materials.....	0.8	—
Water Resources.....	14.2	1.0
Soils.....	0.2	—
Research Equipment.....	2.9	0.2
Sub-total.....	42.3	2.9
<i>Agricultural Economics</i>		
Economic Development.....	3.9	0.3
Econ. of Production.....	54.1	3.6
Marketing, Distribution and Trade.....	18.3	1.2
Resource Use and Development.....	10.3	0.7
Agricultural Policy.....	4.8	0.3
Co-operatives.....	2.9	0.2
Methodology and Theory.....	1.8	0.1
Econometrics.....	1.4	0.1
Inter-Regional Competition.....	0.8	—
Sub-total.....	98.8	6.5
<i>Rural Sociology</i>		
Anthropology.....	3.7	0.2
Social Psychology.....	0.6	—
General Sociology.....	10.1	0.7
Rural Sociology.....	6.5	0.4
Extension.....	1.0	0.1
Sub-total.....	22.1	1.4
Grand total.....	1,483.6	100%

only 6.5 man-years of effort were allocated to research in the field of rural sociology, far from sufficient to cope with the immensely complex social and human problems of the rural community.

The relatively small amount of resources devoted to research in the field of agricultural economics, particularly in the area of marketing, international trade and policy, became very evident to the Task Force in the course of the work. In several areas, the Task Force had to suspend much of its primary activities until considerable background research was carried out. In other areas, the gaps in data and information were a source of continual frustration and delay. The marketing area, in particular, while receiving a great deal of attention from farmers and governments over the past quarter century, has had little effort devoted to it from a research point of view. Questions raised 25 years ago with respect to commodity marketing boards are still unanswered, mainly because little research has been done in this area during the intervening years. One of the primary weaknesses of the provincially-appointed Farm Products Marketing Boards has been the lack of research on which to base decisions as to whether various producer commodity boards should be established or not. Grain marketing, one of the largest and most significant aspects of the agricultural industry, remains an almost virgin area for research. The Task Force finds it difficult to believe that the Canadian Wheat Board, an organization with an annual volume of business close to one billion dollars, should devote so little resources to marketing research. The newly formed Canada Grains Council will be seriously handicapped unless a great deal more support is forthcoming for its research program. Despite the predominance of export trade for many Canadian agricultural commodities, relatively little effort has been devoted to the study and investigation of matters relating to international trade. In spite of the crucial importance of export markets for Canadian farm products, the Task Force found little research and information available in this field of concern.

In few areas of economic and sociological research relating to the agricultural industry in Canada can it be said that sufficient data and information are available on which to build reliable policies and programs.

The Task Force was able to close some of the gaps in economic research but, in many cases, the research job to be done was beyond the time and resources available. We note that concern about the lack of research in agricultural economics has been of long standing interest to farm organizations and governments but to date only a small amount of resources have been allocated to the area. The point might be illustrated by quoting from a recent publication of the Canadian Federation of Agriculture.⁶

As evidence of their real concern, we would emphasize that western grain producers have repeatedly sought approval for a small (1/10 of 1%) deduction from the sale price of all grains handled by the Wheat Board, to be controlled by producers in their support of research. It is to be regretted that neither the Government nor the Canadian Wheat Board has ever taken positive action in support of this request.

⁶ A report to farmers from the Canadian Federation of Agriculture, May 28, 1969.

Several years ago, the farm organizations were criticized for the lack of research devoted to their policy recommendations:⁷

The Commission wonders how the small group of persons responsible for research in the present farm organizations can be expected to carry out the research and investigation associated with the long list of complex topics dealt with at annual conventions, and in the various briefs and submissions presented to governments each year. For example, an examination of briefs submitted by farm organizations to the Federal and provincial governments over the last 2 or 3 years included such topics as: crop insurance, farm credit, deficiency prices, highway traffic, education, Natural Products Marketing Act, parity prices, realty taxes, PFRA, vertical integration, exchange devaluation, tariffs, the E.E.C., the small farm problem, ARDA, transportation and freight rates, trade and surplus disposal, marketing boards, broadcasting, health insurance

The Commission went on to observe:

If farm organizations are to analyse properly the many complex problems which beset the farm industry, and if they are to make intelligent and responsible recommendations on farm policy, they will need to increase greatly the amount of money which they are presently investing in their research departments.

The cost and complexity of most agricultural research projects are beyond the means and capacity of the individual farmer. At the same time, however, the Task Force feels that much more could be done in agricultural research by private industry and farm organizations. In the early 1960's a national agricultural policy conference was held in Winnipeg to lay the groundwork for the establishment of its Agricultural Economics Research Council of Canada. This organization was established in 1963 and given a mandate by the Federal and provincial governments, farm organizations and private industry to proceed with a comprehensive research program relating to agricultural policy matters in Canada. Because of a lack of adequate financial support, this organization has made relatively little progress since its inception and, indeed, faces a precarious existence at the present time.

MARKET-ORIENTED COMMODITY RESEARCH

In addition to the need for greatly increased support of research in agricultural economics, other areas of agricultural research require special attention if Canadian agricultural commodities are to remain competitive in world markets. No attempt is made here to develop a comprehensive policy for agricultural research in Canada or to set out an exhaustive list of research projects which require further emphasis. Rather, particular areas will be singled out for attention as examples of the general approach which should be taken in using agricultural research as a means of making Canadian agriculture a more competitive force in international markets.

⁷ Report of the *Manitoba Commission on Farm Organizations*, December, 1962.

Elsewhere in this Report, the Task Force recommends the development of agricultural policies which recognize more explicitly the forces of the market place. We recommend the same point of departure for agricultural research. Not only must there be a greater emphasis on market-oriented commodity research but our agricultural policies must be such that the results of this research are transmitted to the market place. It is pointless to develop higher yielding grains if our price and marketing policies lead to an accumulation of costly surpluses.

To encourage a greater emphasis on market-oriented commodity research, the Task Force recommends that a strong and continuing program of commodity marketing research be developed by the Economics and Business Branch of the Federal Department of Agricultural Industry. To ensure that the results of this research are closely integrated with the work of the scientists and engineers of the Research Branch, the Task Force recommends that the heads of these two branches be requested by the Minister to produce a joint proposal for the development of an administrative arrangement to bring about the necessary co-ordination (see Chapter 11). In addition, it is recommended that greater emphasis be given to inter-disciplinary research projects involving agricultural economists and the natural scientists. This inter-disciplinary research should cover the entire spectrum from production through to the international markets. Special budgets and administrative arrangements should be developed to encourage inter-disciplinary research in both the Federal Department of Agricultural Industry and in University Faculties of Agriculture.

We now turn our attention to areas of commodity research which require particular attention from the market point of view.

A study by the Economic Council of Canada indicates that Canadian wheat yields have been lagging behind our international competitors.⁸

In Canada the most important crop is wheat, which has traditionally accounted for the largest portion of Canada's agricultural exports. In international comparisons of wheat yields per acre, not wheat quality, Canada ranks low and appears to be falling further behind. After the Second World War, Canada ranked about twentieth in wheat yields per acre among major producing countries; today Canada ranks about twenty-eighth.

The Economic Council noted that the U.S.A. had proportionately twice as many resources devoted to wheat research as compared to Canada.

The yield factor will become increasingly important if Canada is to be fully competitive from a price point of view. Current research relating to hybrid wheats appears to have considerable promise and should be given considerable priority.⁹

⁸ *Fifth Annual Review*, "The Challenge of Growth and Change," Economic Council of Canada, September, 1969, p. 92.

⁹ Shebeski, L. H. and McGinnis, R. G. "Advancing Technology in Wheat Production", a paper prepared for a Wheat Marketing Seminar, Dept. of Agricultural Economics, University of Manitoba, December 3, 1969. Shebeski and McGinnis estimate that hybrid wheats have the potential to increase yields by as much as 50 per cent in the foreseeable future.

In addition to yield, quality is becoming an extremely important factor in the wheat markets of the world. The need for the development of high protein bread wheats of predictable quality and uniformity is imperative if Canada is to retain her position in the traditional wheat markets. Closely related to the need for increased emphasis on wheat breeding research is the need for continuing work in the area of cereal chemistry and milling technology. Advances in milling and baking technology, particularly in Britain, have had a profound effect on Canada's wheat exports during recent years.¹⁰

If Canada is to meet the export market demand for high protein bread wheats of predictable quality and uniformity, techniques for the protein grading of wheat will have to be developed. The work initiated by the Board of Grain Commissioners is a commendable step in the right direction.¹¹ However, much more research remains to be done before a practical system of protein grading can be developed.¹² An additional problem of immense significance relates to the implications of protein grading for land use in Western Canada.

Potential markets for Canadian rapeseed appear to be very promising but the Task Force found appallingly little (but highly productive) research devoted to this important area of Canadian agriculture.¹³ If Canada is to remain competitive in the export of rapeseed to countries such as Japan much more research is needed to increase both the oil and protein content of the rapeseed.¹⁴ The protein content of rapeseed meal must be increased substantially to compete with soybean meal, a major export from the U.S.A. Spectacular progress has been made by Russia in increasing the oil content of sunflowers, a major competitor with Canadian rapeseed oil. Much more research is needed to eliminate the thioglucoside components and to reduce the fibre content of rapeseed meal, if the meal is to compete with soybeans in animal feeds.

If Canada can become more competitive from a price and quality point of view, the markets for rapeseed oil and meal are bright. One estimate suggests that Japan alone could require in the neighborhood of 500,000 tons of rapeseed in the foreseeable future.¹⁵ Research can play an extremely important role in keeping Canada in the forefront of the rapeseed markets of the

¹⁰ Irvine, G. N. "Technological Advances in the Milling and Baking Industries and their Effect upon Markets for Canadian Wheat". Paper prepared for a wheat marketing seminar; Department of Agricultural Economics, University of Manitoba, December 3, 1969.

¹¹ See Martens, V. and Hlynko, I. *Protein Content of Canadian Wheat, 1927-1968*, Board of Grain Commissioners, Canada Department of Agriculture, 1969.

¹² *Board of Grain Commissioners, Winnipeg, 1969*. See Anderson, J. A. "Introduction of Protein as a Grading Factor for Wheat-Options and Implications," a paper delivered to a Wheat Marketing Seminar, Dept. of Agricultural Economics, University of Manitoba, December 3, 1969.

¹³ See, for example, *Proceedings of the Second Annual Meeting of the Rapeseed Association of Canada*, Regina, March 3-4, 1969.

¹⁴ See report of a two-man team of Canadian scientists who visited Japan March 8-22, 1969, on behalf of the Rapeseed Association of Canada; See also Stefansson, B. R. "Plant Breeding and New Variations of Rapeseed." *Proceedings of the Second Annual Meeting of the Rapeseed Association of Canada*, Regina, March 3-4, 1969.

¹⁵ *Rapeseed Mission, Japan*, March 8-22, 1969, Rapeseed Association of Canada.

world. The Task Force commends, in particular, the Rapeseed Association of Canada which has encouraged and supported a market-oriented approach to rapeseed research, an approach which should be emulated to a greater degree in other types of commodity research.

The Task Force has noted elsewhere in this Report, the decline in Canada's exports of feed barley at a time when world trade in coarse grains has been expanding. If Canada is to capture a larger share of these markets, further research will be necessary to develop higher yielding varieties of coarse grains and feed wheats. If the Task Force's recommendation for a more competitive pricing system for coarse grains is adopted, the significance of higher yielding feed grains will become readily apparent. Competitive prices in the export markets of the world which at the same time yield the producer a reasonable return per acre will only be possible if yields are increased substantially. In the final analysis, it is not the price per bushel but rather the net income per acre which is of vital concern to the farmer. The Task Force reiterates, however, that higher yielding grains are of no avail if inflexible pricing and marketing quotas prevent the farmer from competing. As one western producer explained it,¹⁶ "We believe many more Manitoba farmers prefer the challenge of market opportunities rather than the restrictive policies of our present quota system on feed grains."

If Canada is to achieve the 100 million bushel export target for barley, a competitive pricing system supported by an aggressive program of research in marketing, farm management and the natural sciences appears to be the approach which must be taken. A 25 per cent increase in feed wheat or barley yields would enhance considerably the competitive position of the Canadian producer in the export markets of the world.

The possibility of developing Canadian barley and rapeseed to the point where they could become more competitive with American exports of corn and soybeans should not be overlooked. The payoff to Canadian farmers on research of this type could be enormous, particularly in countries such as Japan where increased livestock production will create a growing demand for high carbohydrate-protein animal feeds.

Many other areas of agricultural research could be cited for attention. In general, the Task Force recommends that high priority should be given to those areas of research where substantial market opportunities appear evident and where research has a significant role to play in helping Canadian producers realize these opportunities. For example, research relating to the development of a strong and vigorous feeder cattle industry warrants high priority given the export prospects for this sector of Canadian agriculture. This implies the need for a strong program of marketing research in Canada and the willingness of research administrators to allocate their budgets and organize their research programs in line with the potential market opportunities for Canadian agriculture.

¹⁶ Proceedings of a marketing seminar, Brandon, Manitoba, March 5-6, 1969, Manitoba Dept. of Agriculture.

The Task Force emphasizes above all that the benefits of agricultural research to the farmer will not be realized unless pricing and marketing policies are developed which permit the results of the research to be transmitted to the market place. It is fruitless for example to spend millions of dollars on research which increases the yield of grain if the pricing and marketing policies are so inflexible and restrictive that the increased grain yield must be stored at great public expense. At the same time, agricultural scientists must become more conscious of the needs and opportunities of the market place; more emphasis on market-oriented commodity research is required.

To the extent that food consumers in Canada benefit substantially from the results of agricultural research, the Task Force notes in passing that budgets for agricultural research should not be regarded as being of exclusive benefit to farmers. The fact that prices for many agricultural commodities are no higher than they were several decades ago, while the prices of most other goods and services have increased very considerably, indicates that the productivity gains in agriculture have been passed along to an important degree to the domestic food consumer.

RECOMMENDATIONS

The Task Force recommends:

1. That the amount of resources devoted to agricultural economics research in Canada be doubled within the next five years.
2. That the Canadian Wheat Board proceed immediately to develop a strong marketing research department.
3. That the national farm organizations be encouraged to develop an adequate research staff for the purpose of conducting studies and investigations relating to agricultural marketing and policy matters; that serious steps be taken by the Federal Government and the Wheat Board to meet the repeated request of western grain producers to have a deduction made on their grain sales through the Wheat Board to support producer-sponsored research.
4. That all provincial marketing boards be encouraged to develop strong programs of research relating to their particular problems and policies.
5. That the proposed Economics and Business Branch of the Department of Agricultural Industry develop a continuing program of commodity marketing research.
6. That a great deal more emphasis be placed on market-oriented commodity research in the Research Branch, Department of Agricultural Industry.
7. to ensure that the commodity marketing research of the Economics and Business Branch is closely integrated with the work of the scientists and engineers of the Research Branch, it is recommended

that the heads of these two branches be requested by the Minister, Department of Agricultural Industry, to produce a joint proposal for the development of machinery to bring about the necessary co-ordination.

8. that the Economics and Business Branch of the Department of Agricultural Industry develop a strong program of research relating to the agricultural business sector of the Canadian economy.

part four

LOW-INCOME SECTOR

chapter sixteen

THE LOW-INCOME SECTOR

INTRODUCTION

The most perfect of economic plans is impractical and unacceptable unless it fully takes into account the human factor. The really poor one-third of the farming population is the sector which puts to the test the humanity and perceptive sensibility of planners. Before committing plan to drawing board a difficult concept must be learned and subjectively evaluated; the concept is that of poverty itself. The economic measure of income is not a sufficient measure. The poor are deprived of many things taken for granted by society, let alone an affluent society. Money is a factor but for the poor so are warmth, the opportunity to talk and be listened to with respect by someone outside the family, or a dentist within reach. How does the community reach poor people? How effective are Canadian methods of trying to reach them? What better ways can be tried to reach and do something for the rural "economic drop-outs"? The answer is not simply economic efficiency, productivity and viability.

The view is widely held that, of 430,000 farms in Canada in 1966, only a third or so are large enough, by today's standards, for long-run viability. The remaining two-thirds are by no means homogeneous but appear to fall into two groups of about equal size—a "middle" stratum of the moderately well-off, and a bottom stratum of about 100,000 who live in poverty. The middle stratum includes part-time and full-time farmers of varying degrees of success and for whom the future holds many uncertainties. Well-designed long-term policies are needed to ensure that some, in the middle stratum, move up to full economic viability that successful part-time patterns endure

and that those better suited to other occupations can make the transition out of agriculture. However, the only factor distinguishing this group from the "poverty" level group below is that most of the present needs of its members are met, at least at a minimum level. There is no guarantee that ability, initiative or the spirit of co-operation is any more prevalent in the economically mediocre group than among the still less fortunate in the poverty group.

Will Time Solve The Problem?

The continuing exodus from agriculture and in particular the declining number of small-scale farms (a drop of 100,000 in the five-year period ending 1966) encourages hopes that no special programs are needed to alleviate farm poverty. If one simply projects the 1961-66 trend, the number of small-scale farms remaining in ten years time would be very small. Unfortunately, a closer examination of the composition of this "trend" produces no grounds for optimism.

Roughly 50 per cent of the reduction in the small farm sector in the early sixties was due to expansion which placed farms into "sales classes" higher on the scale. This kind of upward mobility is very closely related to increasing sales in agriculture as a whole (from \$2.3 billion in 1961 to \$3.3 billion in 1966—an increase of 50 per cent). It would be most unwise to count on a 50 per cent increase every five years.

The other half of the decline in the number of small farms 1961 to 1966 represents the dissolution of farms as individual entities, as men quit farming altogether. While this group includes those farmers who left farming for other jobs, their numbers were relatively small. It is largely death and retirement of older operators which takes men out of agriculture. This means that, unless out-migration is greatly accelerated, the projection of further reductions in the small-farm sector is very closely related to age structure.

The analysis of census data is necessarily limited to the *net* change in numbers of farm operators between 1961 and 1966. One cannot know how many men left farming because the 1966 count includes men who entered farming in the five-year period as well as those who were farming in 1961. However, it can be shown that *net* withdrawals were limited to the age groups over 55 years in 1961: the latter showed a net decline of 62,000 operators whereas the age group under 55 years recorded a net *gain* of 12,000 operators. The calculation of net withdrawals is shown in the Task Force Position Paper.¹ The calculation is based on all operators but it is reasonable to suppose that the pattern for small-scale operators would not differ greatly.

Age of small-scale farm operators in 1966 is summarized as follows:

	No.	Per Cent
Under 45 years.....	84,277	36
45 to 54 years.....	62,032	26
55 and over.....	91,548	38
	237,857	100

¹See *Low Income Sector in Canadian Agriculture*, a paper prepared for the Canadian Agricultural Congress by the Federal Task Force on Agriculture, Ottawa 1969, Table 3.

Many of those in the third group (age 55 years and over) will leave farming shortly; using the rate obtained from 1961-66, one can predict the disappearance of approximately 40,000 small farm operators in the next five years. But what of the large group of under 45's and those in the middle years, the men who entered farming after World War II? Since both groups had a *net gain* between 1961 and 1966, it is evident that significant reductions in the under 45 years class cannot be predicted unless there are much more effective policies to take men out of farming; in fact, it seems likely that policies to limit entry would also be necessary. The middle category presents even greater difficulty. Still well below retirement age, these are men with low mobility into other occupations and it is difficult to see significant reductions in their numbers over the next 15 to 20 years.

In short, the "small-farm" problem will be present for some years yet,² and it is likely that the numbers of the "really poor" will decline slowly because such a large proportion are middle-aged. Younger operators are under-represented in the poverty sector because so many have made an adjustment through part-time farming. It is possible that the numbers in the poverty sector will shrink through further extensions of supplementary earnings. It is also likely that the "poverty line" of \$3,000 income will have to be increased and that technological change will continue to push into low income levels those units which are not suited to rapid change.

REVIEW OF EXISTING POLICIES

Improving Off-farm Opportunities

The most attractive answer to the problem of low incomes in agriculture is that labour move to employment in other industries. The process has been going on throughout the post-war era. Some difficulty was encountered during Canada's years of stagnation 1957-62, when unemployment averaged about 6 percent. In the last half of the sixties the Federal Government has added a manpower mobility and training program which attempts to help the under-educated and inadequately trained.³

Training programs: Manpower programs are important; they do much to upgrade the labour force and to see that labour market requirements are matched by a qualified labour supply. Their role in reducing the numbers of

² Tending to confirm our view that off-farm migration will lead to no more than minor reductions in the poverty sector are some American statistics on farm population. In sharp contrast to the annual reduction in numbers of farmers over the past 30 years, the counts at January 1968 and January 1969 revealed no change. Tentatively, officials of the U.S. Department of Agriculture infer that the period of large scale movement to the city has ended; the farmers who remain, by and large, are expected to live out their lives on the farm. The facts are less well documented in Canada but it is probably safe to assume that the heart of the poverty problem centres on farmers in their middle years.

³ The main services offered by the Department of Manpower and Immigration (established 1965) are educational up-grading and job training, information on job supply, and assistance to those moving to high employment areas. Most of these services have a longer history but have been expanded or given new emphasis since 1968.

farm poor, however, appears limited. The best hope is that Manpower programs will provide good non-farm alternatives to younger operators, to the sons of marginal farmers and to other rural youth who are ill-equipped to become modern farmers. This in itself would be a major contribution but it is unrealistic to look for any great impact in the ranks of the middle-aged who make up a high percentage of the farm poverty sector today.

Even to reach younger operators poses problems. For example, most training courses require at least a Grade 10 standing. This is not an insurmountable barrier since upgrading courses are offered from the Grade 7 level (and in a few training centres, from Grade 4). Obviously, however, efforts of this kind will not appeal to every marginal farmer whose education is deficient.

"Reaching" rural people with training programs: "Reaching" rural people who could benefit from training and other Manpower services is difficult. Observers of the American Manpower Development and Training Act, five years after its inception, report that programs to enhance mobility have been very limited in effect in rural areas. It is reasonable to assume that the problems are similar in Canada considering that only the unemployed have been eligible for moving grants and loans—the number of Canadian farmers who have been helped to move to jobs must be almost nil.⁴ More effective penetration of rural areas is possible given new techniques such as mobile clinics. It is justifiable to intensify efforts to train rural youth for non-farm employment but not necessarily so to train established farmers. Income levels for low-skill occupations in the city are also very low and living costs are higher. A study of rural-urban comparisons in the Atlantic provinces and the Gaspé, concluded that those remaining in depressed rural areas were right not to move.⁵ While this judgment applies to workers without special training (which would improve the picture) it is essential that no general decisions on training and moving be made without asking such specific questions as what training? For what jobs? For what pay?

A trap to be avoided is that of regarding a small payment to a low income producer as wasteful but considering the alternatives—a large welfare payment or expenditure on training—as somehow more desirable. Thus, a small income supplement which keeps a 50 year old milk producer in operation in his own community (albeit depressed) is not necessarily less desirable than a program which trains him, moves him and *perhaps* employs him for a few years at a "viable wage". Keynes made an interesting observation thirty years ago on a similar point.

⁴ In 1966-67, only 2,100 persons in Canada received loans or grants for moving. Eligibility requirements have been eased, in 1969.

⁵ Jane A. Abramson, *Barriers to Population Mobility*; Centre for Community Studies, June 1968.

A similar inference may be drawn from Bishop's study of migration which showed little reluctance among rural people to take advantage of *bona fide* employment opportunities even if the change meant moving long distances. C. E. Bishop, "Economic Aspects of Migration from Farms in the United States", *Labour Mobility and Population in Agriculture*, Ames, Iowa, State U. Press, 1961.

It is curious how common sense wriggling for an escape from absurd conclusions, has been apt to reach preference for *wholly* "wasteful" forms of loan expenditures rather than for *partly* wasteful forms, which, because they are not wholly wasteful, tend to be judged on strict "business" principles. For example, unemployment relief financed by loans is more readily accepted than the financing of improvements at a charge below the current rate of interest . . . ⁶

High employment levels: Emphasis must be placed on job supply as much as on labour mobility. Non-farm employment as a solution to the problem of low income farmers, faces competition from the unemployed (432,000 in April 1969), and about 200,000 additional workers joining the labour force each year, as well as from the low income people of rural Canada. Of a similar situation in the United States, M. L. Upchurch concluded:

With present rates of growth in the labour force and a flood of urban youth to accommodate, the prospects for solving the rural poverty problem by outmigration appear dim.⁷

Bringing Industry to Rural Areas

The Canadian anti-poverty program has also attempted to create new jobs in economically lagging areas through financial incentives influencing the location of plants.⁸ The program seems not to have worked with equal effectiveness in all areas.⁹ The Georgian Bay region, for example appears to have derived great benefit, both in terms of increased employment and the introduction of "growth" industries which, in turn, have led to significant improvements in wage levels. In New Brunswick however, the impact of ADA grants is believed to have been rather small. In New Brunswick the new industries established were more traditional (most of them were resource-based), gave chiefly low-skill, low-wage employment and generally failed to find industrial linkages through which secondary employment might have been generated by the ADA plants. A main reason for the better results in the Georgian Bay area is obviously the proximity to major markets in southern Ontario. As the authors of the study point out, it is probable that industry would have been moving in within ten years anyway, and that ADA's chief contribution lay in speeding up the process. In areas which have no real advantages to begin with, industrial incentives may be quite incapable of sparking genuine development.

Rural "industrialization" is highly relevant to a discussion of the farm problem because "bringing industry in" is the solution most strongly favoured

⁶ Keynes, J. M., *The General Theory of Employment Interest and Money*, Macmillan, 1969, *A Brief on the Work of the Area Development Agency Program Assessing its Impact on Poverty*.

⁷ *Journal of Farm Economics*, May, 1964.

⁸ The program began in 1963 under the Area Development Agency of the Dept. of Industry. Somewhat modified, the program in 1970 is directed by the Dept. of Regional Economic Expansion.

⁹ Research on this subject is still preliminary. See Special Senate Committee on Poverty, 1969, *A Brief on the Work of the Area Development Agency Program Assessing its Impact on Poverty*.

by a great many farm people. It is the dispersion of industry to rural backwaters that is wanted by a high percentage of political supporters, although it does not always work. The ADA program in New Brunswick, it is agreed is a weak type of development. In fact, industrial dispersion of this type is no longer an objective of policy. Instead the industrial incentives program is now strongly oriented to locating industry in larger towns and cities which are to act as "growth centres".

In summary, industrial incentives seem capable of adding to employment in slow-growth regions through development of growth centres. A good case could be made for location grants to meet the growing problem of congestion in the larger metropolitan area, establishing industry in satellite cities and in smaller centres having good transportation links to existing industrial areas. Growth centres of this kind might be particularly helpful to rural people in increasing the availability of part-time employment. However, there can be no thought that incentive grants or any government programs have the power to put industry wherever there are farm and other rural people in need of employment. Finally, as with Manpower policies, it is unlikely that off-farm employment can draw off large numbers of farmers from the poverty category.

ARDA

The main thrust of the Canadian poverty program in rural areas has been provided by the Agriculture Rehabilitation and Development Act of 1961. The thrust has been considerably blunted because ARDA was never simply an anti-poverty program. The major objectives are (1) to raise incomes "in rural areas", including farmers generally, not merely the poor and (2) to improve resource use both as a means to raise incomes and as an independent objective.¹⁰ The latter—improved resource use—underlies a high percentage of the major ARDA programs.

As noted, it is possible to divide Canadian farmers into three roughly-equal economic groups. One group is viable, one is neither well-off nor poverty-stricken, and one is below the poverty level. ARDA programs have been of much greater value to the middle group than to the poverty-level group, largely because of ARDA's emphasis on improving resources and resource use. The purchase of marginal land for parks, recreation or forestry may bring about improved land use and provide poverty-level farmers with immediate cash from their sale of property but it does little to provide them with an alternative source of livelihood. Help offered farmers on their land often involves heavy expenditures on drainage and clearing; small farmers find that they are not in a position to take on the substantial obligations involved but the middle group are better able to do so. In the case of

¹⁰ For a more extensive discussion, see H. Buckley and E. Tihanyi, "Canadian Policies for Rural Adjustment, A Study of the Economic Impact of ARDA, PFRA and MMRA." Prepared for Economic Council of Canada, October 1967.

community pastures, which represent a major ARDA expenditure, the chief beneficiaries have tended to be viable or middle income farmers.

While there is no doubt that some small farmers have received extra income through ARDA programs, public funds could have had greater effect on those below the poverty line if programs had been selected from the stand-point of how best to relieve poverty rather than to improve the use of the land.

Recognizing this indirect limitation, the second ARDA agreement (1965—renamed Agricultural and Rural Development Act) provided a new cluster of programs intended to speed the removal of small-scale operators and to channel land thus released to operators who could become viable. The programs deal with impediments to the natural process of farm consolidation: on the sellers' side stagnation in the land market are offset by ARDA's willingness to purchase farms; the lack of knowledge concerning off-farm opportunities or lack of money to retire is countered by help in contracting Manpower services and providing income supplements to retiring farmers. On the buyers' side ARDA helps expanding farmers gain access to land, often at lower cost. Farmers also receive grants for land improvement, loans and individual counselling services to improve prospects for the consolidated farm unit.

Farm consolidation is now a major ARDA program in Ontario, Quebec, Nova Scotia, P.E.I. and the Interlake area in Manitoba. On the face of it, the programs appear admirably suited to effect the kind of adjustments most needed. Certainly, excellent work is proceeding. On closer examination, however, there seems to be two serious defects.

What happens to farmers selling out? The consolidation program improves the lot of those sellers who are suited to enter the federal Manpower program provided Manpower services are readily available. A commendable feature of the Ontario plan is the supply of counselling staff to assist the Manpower program in rural areas. For older operators it may work the other way, however, because the average purchase price is too small to guarantee retirement income.¹¹ The same could be said of the poorly-educated and the ailing, too young to retire but not easily fitted into the labour market. These difficulties are surmounted in the FRED program for eastern Quebec which explicitly provides social assistance to any sellers not moving into the Manpower program. Ontario offers limited income supplements (to bring total income to \$1,200) to sellers in the age group 55 to 64 years.

Another important consideration is the likelihood of farm assets increasing in value in any area with an active land market. On average the value of land and buildings of small farms increased by 50 per cent between 1961 and 1966. The appreciation must be taken into account as a form of income. It must therefore, be very clear that the total income which sellers can earn later will exceed their small farm income, any part-time earnings and the appreciation of farm values, before sellers are encouraged to sell their farms.

¹¹ \$5,000 in Nova Scotia, \$6,000-\$9,000 in Ontario.

At times the desire to encourage consolidation seems to have become almost an end in itself and has obscured the question of what happens to those who have sold out.

A second question is whether a tendency exists to help farmers who do not need it. Turning to the buyers' side, it seems generally agreed that farm consolidation programs are not for farmers in the very low income levels but for those in an intermediate position—neither well-off nor poverty stricken. Where farms are small, even a doubling in size may add only a few hundred dollars in income and the costs incurred (by the farmer as well as by ARDA) are likely to be disproportionately large. One can therefore agree with the prevailing ARDA view that farm consolidation programs are properly directed to a particular class of farmers; namely, those who do not quite meet the standards of existing credit sources but who, with some land added and a generous infusion of management services, would be able to obtain credit and ultimately, a position of full viability.

From the industry standpoint it is clear that these are the farmers to assist. The difficulty is that such farmers, by definition, are not the really poor. Desirable as it is to help them, it should not be thought that ARDA programs get through to effectively assist the really poor. Moreover, as the plan has operated in Ontario and possibly elsewhere, not all farmers qualifying for assistance could be said to lack access to conventional credit.¹² ARDA officials claim that this is due to special and temporary situations, notably the desire to establish large-scale ranching units in northern Ontario and the absence of a suitable candidate in other areas where land had been purchased. From Manitoba's Interlake comes evidence that larger farmers from outside the district where programs apply are purchasing land under the consolidation plan.

Looking at the positive side of the land consolidation program, it is clear that under its auspices, ARDA field staff are providing services which have long been needed in areas such as P.E.I. and the Gaspé, and have demonstrated an impressive ability to deal with such problems as fragmented land parcels, low levels of farming knowledge and lack of money for expansion. The program provides a service of benefit to the "middle stratum" of neither well-off nor poverty stricken.

In principle, ARDA is a new approach to the problems of low income people in an industry going through evolutionary change. Instead of the traditional approach of trying to raise low farm incomes by increasing prices of the products sold, ARDA attempts to bring about structural changes in the farm units themselves and in marginal rural communities. Unfortunately, ARDA now suffers from excessive expectation by its early supporters; the principles have been hard to translate into practice and into effective programs and results. It is to be expected when attitudes must be re-examined

¹² Data for the first year of operation in Ontario, reported by size categories, showed the consolidating farmers to have average assets above \$35,000 and above \$50,000 in 40 per cent of the cases.

and changed by the people holding them (not only the poor but also government officials); it is expected when attempts are made to promote local participation and leadership, and when research and administration experience in this direction are in short supply.

The disappointment remains. The range of programs offered under ARDA is still surprisingly narrow. The choice of programs (which rests with the provinces) reflects varying interests and financial ability but as a general rule programs of industry-assistance have tended to take precedence over attempts to deal with rural poverty as such.

FRED

At mid-1966, the commitment of federal funds under ARDA amounted to \$62 million of which about half had been spent. Contrasted with the \$85 million to be shared between the Federal government and a single province to implement a plan in Manitoba's Interlake (pop: 58,000), the scope of comprehensive area planning as provided by FRED (Fund for Rural Economic Development)¹³ is placed in better perspective. In most cases FRED plans represent an all-out attack on poverty, co-ordinating the services and programs available elsewhere and adding to them.

FRED plans in Gaspé and the Interlake provide for drastic reductions in farm population to a point defined by the number of viable farms the resource-base will support. A high proportion of the redundant farmers are treated as probable retirements and the number of farmers to be accommodated under Manpower programs is relatively small. Manitoba planners have not specifically dealt with the problems which retirement may pose. Although it may be assumed that provincial welfare services will automatically be extended to low income farmers who cannot be fitted into Manpower programs, one feels that Quebec's approach is more deserving for the explicit recognition of this need. Under Quebec's plan, any farmer who moves out of a marginal parish is eligible for welfare as well as for training. Further flexibility is evidenced in the provision for a semi-retirement category: older operators are assisted to undertake a modest expansion in their farm operation if they so desire.

Under FRED is massive investment in education upgrading, training and manpower mobility. There is an attractive special feature of the Quebec plan which recognizes that not all individuals are capable of rapid absorption into the labour force. Given their present level of general and vocational training provision is made for a second group of trainees requiring "special rehabilitation programs over a more or less long period". These, presumably, are from marginal farms, have a very low level of education and a long history of dependence on welfare.

¹³ FRED plans have been launched or announced for: the Interlake; Lower St. Lawrence-Gaspé; two regions in New Brunswick and one for the Province of Prince Edward Island. A plan for nine counties in Nova Scotia was pending in 1969.

Much of the total cost under both the Manitoba and Quebec plan is for field workers, who are in the communities to make opportunities known, to advise on access to government programs, to supply individual and group counselling services, to assess prospects for individual farm units and advise on expansion where feasible.

Industrial development seems to have been given less emphasis than training and mobility, although certainly there will be large investments in infrastructure. Strong efforts are also to be taken to encourage growth of industry, notably tourism. Quebec plans make out-migration an explicit objective; the Manitoba plan gives more emphasis to increasing employment within the region.¹⁴

Quebec offers a bold approach to the fact that some people will usually remain in marginal communities whatever is done to increase mobility. Incentive grants will be paid to encourage not just single families but all families to move out. Three larger towns within the region have been designated as growth centres and these will receive grants for municipal services to meet the influx of an anticipated 2,500 families, mainly low-income.

An important feature of both plans—one which greatly improves the chances for “success”—is that community consultation was assigned a high priority in the planning process. It appears that the wishes or priority demands of residents are reflected, insofar as it was possible to do so, in the priorities of the plans themselves. It seems that slow progress in implementing the plan for north-eastern New Brunswick, where community consultation was not a prominent feature, reflects the failure to win full acceptance for goals and procedures in the communities concerned.

DEFINING THE LOW INCOME SECTOR

Anyone dealing with the question of low incomes encounters problems of definition and measurement. The first is a problem of concept—what is a “low” income? Is it low relative to one’s needs or desires—if so the same money income may be low for one person and high for another, or low in a community where living standards and cost of living are high and high in a largely self-sufficient community. In practice, the technique has been to ignore individual aspirations and to select, fairly arbitrarily, a level of income based largely on physical needs. Thus the Economic Council of Canada in its Fifth Annual Review, defined as a state of poverty in 1961 an income of \$1,500 for a single person and \$2,500 for a family of two, with an extra \$500 for each child.¹⁵ No regional variation was introduced.

¹⁴ This may be related to the Interlake’s special problem of Indian-Metis predominance among the poor. If this is so, it appears that the problem of lower capacities for the adjustments imposed by migration is not necessarily best handled by single-minded concentration on creating local jobs—which may not go to the Indian and Metis in any event. Quebec’s provision for special rehabilitation programs appears more appropriate to meet this problem.

¹⁵ Economic Council of Canada, *Fifth Annual Review*, “Challenge of Growth and Change”, September 1968. Based on D.B.S. consumer expenditure surveys, the criterion is the inability to purchase much more than the basic essentials of food, clothing and shelter.

The second problem is one of measurement. In the case of farmers this is particularly difficult because farm income data relate to cash sales rather than net income, because income data are not related to size-of-family data and because farm income data are not related to off-farm incomes. Farmers with good wages from a second job must be distinguished from other part-time farmers who earn next to nothing in non-farm employment. A small farmer with the old age pension will fare much better than his younger neighbour with similar farm income. Large families live in straightened circumstances where a couple might find the income adequate. Added to these and other limitations of income statistics are the limitations of income as a measure of poverty. For example some farmers reporting low farm incomes have nevertheless accumulated substantial assets over the years. Even if assets are modest, the older farmer who owns his home may be distinctly better off than a low income tenant of the same age in the city or in the country. On the other hand, there are many low income farms (particularly in marginal areas) whose capital value is very low; pension plans are absent and the owners are likely to be extremely hardpressed as physical powers decline.

It is apparent that "low incomes" and "small farms" tend to be associated fairly closely, although they are not identical, as explained above. Without attempting any precise definition of what constitutes "commercial" agriculture, it is safe to characterize as small or "non-commercial", those farms reporting under \$5,000 gross sales. About 238,000 such farms were enumerated in the 1966 Census, 55 per cent of all farms in terms of numbers account for only 14 per cent of agricultural production. The total value of sales from this sector equals the sales from 6,000 or so of the largest farms.

The small farm sector so defined includes 75 per cent of all farms in Quebec and the Atlantic provinces, the northern fringes of Ontario and the Prairies. Small farms are by no means confined to these areas, they are found in higher income areas too; about 30 per cent of all small farms are to be found in the Prairies and Ontario (excluding their northern fringes and Eastern Ontario).¹⁶ Also 35 per cent of the farms on the Prairies (excluding northern fringe) had sales of less than \$5,000 in 1965.

In spite of the problems discussed above, it is essential to ascertain the size of the low income problem in farming. Using the rough guidelines selected by the Economic Council in the Fifth Annual Review, a state of poverty is defined for a family with one child as an income below \$3,000 in terms of 1961 dollar values. Since data on farm income cannot be related to family size, subsequent discussion will assume an average family with one child. This figure has not been adjusted upward to meet the rise in price levels since 1961. On balance, then, the poverty-line of \$3,000 per farm family should be adjusted upward to meet the absolutely rock-bottom minimum in terms of the needs of most farm families in the 1970's.

¹⁶ See *Low Income Sector in Canadian Agriculture*, a paper prepared for the Canadian Agriculture Congress by the Federal Task Force on Agriculture, Ottawa 1969, Table 3.

Consider the income from farming operations which may be inferred from gross sales reported to the Census. Calculation of net income (including income in kind and an imputed rental value of the farm house) suggests that farm sales of \$3,750-\$5,000 yield an average net income of \$2,469.¹⁷ Since farms with lower sales have even lower incomes, this means that virtually all the 238,000 farms below \$5,000 sales in 1966 would have less than \$3,000 in farm income; a large number would be well below the \$3,000 line.

The average of approximately \$2,500 is well below the \$3,000-\$3,500 poverty line. This allows some leeway for such factors as: (1) gross sales tending to be under-reported in the Census, (2) imputed rental values of the farm house being below the cost of equivalent accommodation in urban areas and (3) minor supplementary income of a kind not included in the calculations below.

Certain farms in the over \$5,000 sales class are doubtless near or below the poverty line defined above but with average assets of \$43,000 (in the sales class \$5,000 to \$7,499) it seems best to exclude the group as a whole in attempting to measure poverty.

However, among the 238,000 small farms (less than \$5,000 sales) in 1966, about 45 per cent of the operators had some off-farm work and 15 to 20 per cent had full-time or almost full-time jobs. Altogether, the small scale operators contributed 18 million days of work to non-farm industries in 1966. The earnings received are not known but even at moderate wages (say \$15 a day) an additional \$270 million income could be added to the \$460 million that small farmers derived from sales of agricultural products. Obviously off-farm earnings put many small farm families above the poverty line. The question is, how many? The following calculations in Table 1 supply an approximate answer:

- Net income from farming (average for each of five census sales categories) is subtracted from the \$3,000 poverty line. The difference called "income deficiency"—indicates the amount of non-farm income needed to put the family over the line;
- "Income deficiency" is converted into "days of work" needed, assuming an average wage of \$15 a day;
- the number of small-farm operators reporting that much work or more in the 1966 Census is then simply listed. The last column contains those reporting no off-farm work or not enough.

One limitation of the estimate is the assumption that off-farm work of any kind returns the same income of \$15 per day. In fact, there are substantial

¹⁷ From J. M. Fitzpatrick and C. V. Parker, "Distribution of Income in Canadian Agriculture," *Canadian Journal of Agricultural Economics*, 1965. Although the relationship between net and gross was calculated from the 1958 survey data, the fact that D.B.S. aggregates for net and gross showed precisely the same relationship in 1966 (net income = 45 per cent of cash receipts in both years) seems to mean that approximately the same net income should apply in 1966 for the several sales categories. For greater detail on the points covered here and below, see the Task Force Position Paper cited in footnote 16.

TABLE 1
Off-Farm Income of Small Farm Operators, Canada 1966

Gross sales per farm	Estimated net income from farming	"Income deficiency"	Days of off-farm work needed	Small farm operators reporting	
				enough days ¹	not enough days ¹
	(dollars)	(dollars)			
\$3,750-4,999.....	2,500	500	33	11,201	
2,500-3,749.....	1,900	1,100	73	12,078	
1,200-2,499.....	1,200	1,800	120	15,875	
250-1,199.....	500	2,500	166	18,681	
50- 249.....		3,000	200	9,961	
Total.....				67,801	170,000

¹ Enough, that is to produce net incomes of \$3,000.

variations. In low-income rural areas where dual employment takes the form of small-scale farming combined with fishing, forestry or casual labour, non-farm earnings are also low and rural wages tend to lag behind urban standards. Elsewhere, however, many of the part-time farmers are better trained and commute to jobs in factories, mines or operate road maintenance and construction equipment for relatively high wages.

The method used above is crude, admittedly but it is not without supporting evidence. By linking a sample of farm operators from the Census of Agriculture and the Census of Population for the census year 1961, D.B.S. has data presenting actual off-farm wages and salaries by farm operators. Adding wages and salaries to net farm income by sales categories produces a second calculation of numbers over and under \$3,000 income (farm and non-farm combined) and one which inspires more confidence than estimates based on the number of days worked. Nevertheless, the two methods produce strikingly similar results for 1961: 16 per cent of all small-scale farmers are moved over the poverty-line by virtue of "enough days" compared to 13 per cent reporting enough wages and salaries. The latter can be raised to allow for income from self-employment; if we add those reporting self-employment income from non-primary industries, the second estimate is moved to within one percentage of the first.

The "days of work" method followed in Table 1 produces reasonably satisfactory estimates for 1966. It is apparent the majority of small-farm operators cannot be removed from the poverty category on the basis of their off-farm earnings. Although the amount of off-farm income is large in the aggregate, when added to farm income it still leaves two-thirds of all small farms below the poverty level of \$3,000. Thus in 1966 there were 170,000 small-scale farmers who earned less than \$3,000 from farming and other employment combined.

These men were truly "low-income farmers", yet not necessarily heads of "poor" families. Still further qualifications are in order. Firstly, family size as well as financial responsibilities generally decline with age and therefore certain elderly operators could be reasonably well off with less than \$5,000 gross sales. Secondly, a variety of supplementary income sources are available over and above the operators' earnings from employment; these include earnings of other family members, pensions, rents, dividends and interest, family allowances, welfare assistance. Rough calculations from 1961 Census data suggest that "other sources" (including pensions received by the elderly) might remove as many families from the poverty category as were removed by the operator's earnings. In round numbers this results in a figure of approximately 100,000 farm families comprising the poverty sector.

CONCLUSIONS

There seem to be three categories of farms. First, there are the large farmers with substantial incomes; these are the people who receive most benefit from research, extension, price subsidies and similar programs. Second, there are those farmers whose incomes are not large but who are not below the poverty line. Among these are some large farmers whose operations are not very rewarding, some small part-time farmers with considerable non-farm income and some of the more successful full-time small farmers. Third, there are the very poor—those whose income from all sources falls below \$3,000 per family per year. Most of these are small-scale farmers; some are part-time but their off-farm income is small.

Of these three groups, the first is not considered in this chapter but is given a prominent place in all other chapters of this Report. The second is being assisted to a considerable extent under ARDA programs such as land consolidation, drainage improvement and other resource oriented activities. This is desirable, because without assistance many of this group could slip into the poverty category. The third group—the really poor—have been largely missed by programs up to this point with the exception of those in the FRED areas. For those in this group who are above 45-50 years, with few alternative skills, the best programs are probably those which keep them on the farm, help them make some minor improvements, provide income supplements and encourage their children to higher levels of education and to broader perspectives.

There appear to be about 100,000 farm families living in poverty in Canada even after non-farm income has been added to farm income. Only about one-third of the heads of these families are under 45 years of age—the more mobile age group. For many of the remainder it would be difficult indeed to shift to new locations and to new occupations.

Policies followed have been of three types: a Manpower program to move men out of agriculture and into urban jobs; a program of industry dispersion

to make more jobs available in outlying areas and smaller centres; and finally, a number of rural-oriented programs under FRED and farm-oriented programs under ARDA ranging all the way from single farm adjustment to comprehensive area planning intended to bring about basic structural changes in regions and communities. All three approaches are desirable.

The first and second are primarily appropriate for younger people, the third for older people. More specifically, ARDA programs have been more relevant to the "middle stratum" of farmers—not well-off yet not poverty-stricken—rather than to the 100,000 or more poverty level farm families. Programs to strengthen the middle sector are desirable, certainly but the Task Force disagrees with the view that farm programs can only be directed to the nearly-viable and that all below this line are problems for the Manpower program—or for welfare. The programs which are supposed to take men out of agriculture are not going to remove the poor in large numbers. When these programs are evaluated realistically, it is obvious Canada has little to offer hard-core farm poor in most parts of the country.

Other than the welfare programs (which appear to fall short of urban standards and certainly suffer from comparisons with welfare programs in other countries) and some promising beginnings under FRED, the lowest-third in agriculture lies almost beyond the reach of present policies. Conversely, public policy must not be directed exclusively at the poor. It would be a tragedy to neglect those who are "moderately well-off" lest they become the poor of the 1970's. Nevertheless, it does appear that it is the poor who are not being adequately served by present policies.

RECOMMENDATIONS

1. *Strengthen the Manpower Services Available to Farmers.*—Fortunately the naïve laissez faire position concerning low-income farmers "If they cannot make a good income in farming, let them do something else" has become discredited. It is in the national interest to help at least some of them become capable of doing something else and to help the remainder avoid living in poverty and indignity. Specific proposals to assist low-income farmers include:

- (a) The creation of 10 mobile clinics in 1970-1971 in order to improve the "reach" of the Manpower program by taking to rural people the services which are now concentrated in urban centres. The mobile clinics are useful in several ways. They provide information on jobs, training opportunities and urban housing and access to a full range of counselling services both in rural communities and (for those who move) in receiving centres. The mobile clinics should also call at rural schools in order to discuss careers and point out the relevance of mathematics, English and other subjects to the jobs of the 1970's and 1980's. It cannot be stressed too often that with a working life of 45 years, a young man of 18 can condemn himself to poverty by not

devoting a few more years to improving his qualifications as a worker. Mobile clinics need not be large; they might cost \$100,000 each per year.

- (b) The creation of small offices in major cities to help those who move to find housing, to be aware of social services available and to solve family problems arising out of the move from rural areas into major urban centres. Close co-ordination will be required between the mobile clinics and the existing Manpower centres on the one hand and the proposed major city offices on the other.

2. *Higher Levels of Employment.*—The extension of training and mobility services also presupposes that jobs are available somewhere. Merely to increase the number of rural clients will do little good if unemployment rates are high in cities. Policies which can create new employment opportunities are absolutely fundamental to war on poverty. Canada's record toward achieving the goal of full employment since 1954 has been poor; only in 3 years (1956, 1965, 1966) has less than 4 per cent of the labour force been unemployed. This poor employment record makes the 55 per cent decline in the farm labour force between 1946 and 1968 all the more remarkable.

3. *Improved Education.*—Although educational disparities between farm and city and among regions are not new, what is new is that unskilled labour—the traditional route out of agriculture—confronts a declining demand. The changing nature of labour force demand requires higher levels of education among rural people.

The alternative is to continue to suffer the ill-effects of an indigestible surplus of under-educated and inadequately trained, both in urban centres and trapped on the farm. While it is essential to distinguish between formal education arising from the municipal-provincial school system and skill training provided by Manpower, both are necessary to meet the problems of poverty. While all provinces are making efforts to improve rural education, it is doubtful if the poorer provinces can spend enough to help. Even the wealthier provinces are disinclined to commit resources on the necessary scale. The need is not merely for larger school units or higher salaries but for whatever it takes to raise aspirations and make rural students more nearly competitive in the labour market. This accounts for the proposal to create mobile Manpower clinics which would visit schools in order to discuss careers and education.

4. *Welfare and Social Services.*—Except for programs with universal coverage such as family allowances and old age security, present welfare services tend to serve the farm population much less well than city people. Unemployment insurance, for example, does not apply to farmers; health services are mostly poorer and disability allowances harder to obtain; many families live on provincial or municipal welfare at bare subsistence levels and in many districts the welfare budget is not adequate to cover all families in need. Because of feelings of independence or lack of knowledge of what is availa-

ble, low-income farmers receive much less welfare assistance than low-income city folk. A Saskatchewan economist states that his province has 15,000 to 20,000 low-income farmers but less than two dozen on welfare. To ensure that welfare, health and other social services are actually made available to rural poor, the Task Force suggests welfare officers be designated in each county or equivalent in order to indicate the services available. The direct result of this proposal is increased welfare payments.

5. *Guaranteed Annual Income Plan.*—A variation of the guaranteed annual income plan is the negative income tax scheme proposed in the United States. The negative income tax would eliminate many existing welfare schemes. Under one system suggested all individuals and families whose incomes are too low to pay income taxes would receive a payment amounting to one-half of their unused exemptions and deductions from the Treasury. Variations on this basic proposal have become fairly common. "Schemes of this sort provide and confine income transfers to households which really need economic assistance; condition payments solely on the basis of family income and family size, thus achieving a degree of equity in the treatment of low-income households not achieved by existing income transfer programs; are more neutral with respect to resource allocation, might stimulate incentives to work".¹⁸ The incentive to work is built into the negative income tax plan through a rate structure which assures that no individual or family could be financially better off by avoiding employment.

A negative income tax program would embrace all sectors of the economy and not just agriculture and must be considered in that context. A universal system has several advantages but does not necessarily mean more help for poor people than could be had from filling the gaps in present services. It is not necessary, therefore, to await the results of studies now in process which may or may not lead to the implementation of the negative income tax; the important thing is to improve services and increase coverage in rural areas, immediately and until such time as a better system is devised.

6. *Small Changes For Older Farmers.*—There are many older farm people for whom mobility to other locations and occupations is undesirable. The Task Force is of the opinion that in the interests of dignity and self-respect for the individual, it is desirable to keep the welfare sector as small as possible and that the naive view that they "ought to do something else" is untenable. It may be quite inefficient to provide retraining and moving expenses and incur all the personal and social problems involved, for a few years of higher wage employment. All things considered—the poor prospects for other employment, the importance of pride and independence and the fact that whatever skills and experience these men possess are as farmers—it may often be the "best solution" to seek small improvements in farm income.

It is plainly not feasible to raise every submarginal farm to commercial status, nor is it advisable to attempt too much improvement—for example, to

¹⁸ Christopher Green in *Conference Report*, Canadian Tax Foundation, 1967.

encourage large and costly additions to acreage, where management is weak and the life expectancy of the farm unit perhaps no more than 10 or 15 years. Certain types of improvements involve costs that are high relative to the benefits which can reasonably be anticipated, as ARDA has shown. The technique should be to provide assistance which can bring about small changes, perhaps a change in the crop pattern or a little added land; improvements in organization leading to lower costs—minor improvements which would provide a small boost to incomes (a few hundred dollars, on the average) but requiring no large investment outlays. This policy is an exception, it is one that includes transitional programs for older farmers only. Guarantees must be set up to ensure younger farmers are and remain excluded from these special efforts.

The major input required from governments is the supply of advisory services. The Task Force envisages: extension workers specially trained to deal with the lower levels of farming; to provide advice and encouragement on an individual farm basis and short-courses in the community, tailored to the needs of farmers not reached by existing programs. A few tentative steps along these lines have been taken in certain provinces (for example, in the FRED plan for eastern Quebec). Wider application raises at once the problem of availability of staff but it appears that the job does not have to be done by professionals. Alberta has used district farmers for advisory tasks in the Edson district; a spokesman for Manitoba's Department of Agriculture claims one of their most successful programs has been short courses given in local districts using "diploma course" graduates. The latter, it is felt, make better connections with small farmers than highly trained university graduates. The experience in eastern Ontario has been successful by operating on the same basis.

A major advantage of the above approach is that for the first time there would be staff with the responsibility for ensuring that programs do get to poor farmers who would be best off remaining as farmers.

7. Community Approaches.—Since net farm income is now only 5 per cent of national income, the Canadian economy can tolerate some inefficiency in the form of small-scale farmers. What cannot be tolerated is the bringing up of succeeding generations who are grossly handicapped for anything but a diminishing number of low-skill jobs. While young adults are leaving the rural areas in large numbers, it cannot be assumed that all are successfully absorbed in the urban labour force.¹⁹ Because educational standards are low, the presumption is that many secure a precarious foothold and that many come back.

The measures proposed above will assist farm families but not the communities where so many of these families live. "Terminal" aid for small

¹⁹ A recent survey of several parishes in the Gaspé and rural New Brunswick reported that only three of every ten offspring of rural families have moved to an urban place. "Given the large-sized families this means a high retention of offspring from such families in rural areas". Jane Abramson, *Barriers to Population Mobility*, *op. cit.*

farmers and enlarged welfare programs can hardly supply the tax base for radical improvements in education and other community services, yet such improvements are essential to improve the chances for the children of rural poor. Measures to encourage out-migration, though desirable, intensify the problems of poor communities in that they remove customers of village merchants, lower the basis groups. These are the reasons why effective programs for rural poverty must include a community as well as an individual approach.²⁰

Comprehensive planning of the FRED type offers a number of promising leads; money for schools and roads; counselling services to acquaint people with alternatives; closing out of settlement in areas with no potential; strenuous efforts to increase employment in selected growth centres. This is a start but only a start—so long as comprehensive planning is confined to a few FRED areas in eastern provinces and an even smaller number of special development areas under ARDA. After all, the poorer districts in Ontario and the Prairies contain three times as many low-income farms as the whole of the Maritimes.

While not suggesting that FRED be extended to all rural areas containing poverty, the fact is several key programs which account for much FRED expenditure are already operational—Manpower mobility; incentive grants; in some cases, land consolidation. Outside the FRED areas these programs operate without a framework of research and planning to indicate what the long run goals for the community should be and without community participation in selecting goals and means. Co-ordination of efforts among programs is likely to be minimal, and the response from people who do not understand or approve the programs may leave something to be desired. There must be increased co-operation and co-ordination among programs and government institutions in areas not covered by FRED.

8. *Publication of Research.*—ARDA has spent considerable sums on research concerning community needs and development possibilities but apart from a few reports, most of the research work has not been published and is unavailable. This is a mistake.

9. *Special Rehabilitation Programs.*—Because all people are not capable of rapid absorption into the labour force, there must be provision in a few areas for special longer programs for those younger people who fail to meet the requirements of general and vocational training programs.

²⁰ "A firm government commitment to effective Manpower policies should be coupled with a firm commitment to share the financial burdens of maintaining a high level of social services, so that the unfavourable effects of out-migration will not be allowed to dissipate the gains from the adjustment process". Buckley and Tihanyi, *op. cit.* page 23.

part five

RECOMMENDATIONS

chapter seventeen

RECOMMENDATIONS

Each of the foregoing chapters concludes with the recommendations of the Task Force where applicable. This chapter brings together all of these recommendations for the convenience of the reader. It is strongly recommended that the reader consult the analysis of the chapters from which these recommendations are drawn.

PART ONE

THE STRUCTURE

Chapter 1: Agriculture in Perspective

Key Recommendations

The obvious keynote that permeates all our recommendations is that the government should intelligently assist an orderly and planned transition that will encourage agricultural adjustment to achieve the largest possible gains at the lowest possible tangible and intangible costs. Another theme running through all our recommendations is that governments should reduce their direct involvement in agriculture thereby encouraging farmers, farm organizations and agribusiness to improve their management and leadership functions and stand more self-sufficiently on their own. We assume that agriculture should be operated much as any other industry. If this is not feasible, the agricultural industry invites a degree of government paternalism that agricul-

ture may not want. It is important to note that this in no way implies a reversion to anything approaching a simplistic laissez faire system. The system we propose in this Report includes institutions such as national marketing boards, stabilization programs etc. and is compatible with a contemporary complex industrial society.

The main principles of our recommendations, spelled out in detail in later chapters, are as follows:

1. The surpluses must be controlled and reduced to manageable proportions by reducing production drastically, if necessary. Where alternatives exist, production resources must be shifted to more promising market opportunities. Where such alternatives cannot be found, land and other resources must be retired.
2. Governments should provide temporary, limited programs of assistance for the crop switching and land retirement, necessary to cut surplus production. At the same time this Report emphasizes programs to expand demand, particularly on the international scene.
3. Agricultural subsidies and price supports that are not effective and efficient in achieving worthwhile high priority objectives should be phased out.
4. Younger non-viable farmers should be moved out of farming through temporary programs of welfare, education and provision of jobs in other sectors of the economy. Older farmers should be given assistance to ensure that they have at least a "livable" standard of living.
5. Improvement of management must be encouraged by providing seed money for management training, provision of information processing systems, market and price forecasts and other management tools.
6. The organizational structure of agriculture both in the government and private sectors should be rationalized. *Management by objectives, program planning and budgeting, cost-benefit analysis and other modern management techniques should be adopted.* Every public policy should embrace these principles and procedures.

Chapter 2: The Setting

1. The Task Force recommends that publication of the Canadian Price Index of Commodities and Services Used by Farmers be suspended until it has been up-dated to truly reflect the costs of inputs.

Chapter 3: Goals

1. All major stakeholders in agriculture should define their goals explicitly, indicating in quantitative terms wherever possible what it is that they regard as objectives. Such stakeholders include the two main farmer organizations, agricultural colleges, agribusiness trade associations, and other bodies which regard themselves as major stakeholders in agriculture.

2. The Department of Agricultural Industry (now Canada Department of Agriculture) should act as the initial catalyst to request a statement of goals from these organizations. These statements should be of value in creating the National Agricultural Advisory Council (N.A.A.C.) and the various commodity councils proposed in Chapter 11.

3. Thereafter the N.A.A.C. should sponsor periodic conferences on these expressed goals of major stakeholders and on the subject of "management by objectives". The process of definition and specification of goals by the stakeholders in the system must be a conscious and continuous one. Dispersion of interests in agriculture makes it imperative that the N.A.A.C. in consultation with the Department of Agricultural Industry be prime-mover of the recommended system of evaluation of goals and management by objectives.

PART TWO

COMMODITIES

Chapter 4: International Trade

1. The Canadian Government must take further initiatives (as opposed to merely reacting to others' proposals) in attempting to reduce tariffs on agricultural products. What is essential here is a re-appraisal of the old notion, that every tariff cut represents a loss and is to be bargained against similar cuts (assumed to be losses) by others. Canada must assert strong leadership in the direction of securing a resumption of trade discussions on a multi-lateral basis and insist on including agriculture. Failing success, Canada must be willing to join trade arrangements with small groups of nations, including where necessary, bilateral trade treaties (e.g. with the United States). Further, Canada must in international negotiations show a readiness to discriminate in agricultural and non-agricultural commodities against countries or blocs which impose restrictions on Canadian agricultural exports.

2. The primary specific trade goal of Canada should be to negotiate a free trade Continental Market with the United States for livestock and livestock products, feed grains, oilseeds, potatoes and some fruits and vegetables.

3. Government must be willing to subject other sectors of the Canadian economy to increased foreign competition. For example the so-called "voluntary quotas" on Japanese textiles and other manufactures adversely affect the willingness and ability of the Japanese to purchase Canadian grains and meat. If other sectors of the Canadian economy have not made the adjustments necessary to become competitive (as most of agriculture has), then it is time they were helped to do so by the pressure of competition.

4. Canadian agricultural development and farm incomes are adversely affected by tariffs on farm inputs and on inputs used in the agricultural

processing industries. These duties should be removed in the interest of making Canadian farm products more competitive, particularly in an international context. Appendix 1 to this chapter lists the more important input items on which such action should be taken.

5. Canada must experiment with pricing strategies aimed at meeting dumping of products by its competitors, e.g. 1968 and 1969 barley exports by France to Japan. This might be the best possible means to restore international competition to a commercial basis.

6. Increased trade promotion and trade development activities are required. Support and encouragement must be given for joint endeavours by farm groups, by the Federal and provincial governments, by trade associations and private business.

7. Export credit and export insurance. The Export Development Corporation must be fully competitive, in its time horizons and interest rates, with similar bodies in other countries. Credit terms are often as crucial to sales as are prices.

8. Canadian grades and grading must be improved on many agricultural commodities. Failure to move to protein grading has resulted in loss of wheat sales.

9. Emphasis must be placed on continuity of supply for export markets. Because export markets are residual markets for many products and often yield a lower net price than the home market, there has been a tendency to turn to them only in emergencies, a poor way to create a market for exports. British Columbia apples, controlled by a provincial marketing board present a sharp contrast to tobacco, winter wheat and white beans also marketed by provincial marketing boards.

10. Plan food aid to less developed countries. While the Task Force welcomes the break-through in the application of newly-developed grains in the developing countries, substantial food aid requirements will continue for many years. Canada's contribution to food aid needs should be carefully planned and involve commitments of specific quantities of specific foods for periods up to five years.

11. Market research must be greatly expanded. The research should reveal (1) size of markets; (2) quality of products demanded; (3) how markets are changing; and (4) market strategies for Canadian firms. Through research, government must attempt to anticipate international trade developments before they occur, pass along warnings and advise and give assistance to farmers so that they might take advantage of or avoid the impacts of such developments. The Task Force has observed that there is insufficient "forward looking" research and that there is a gap between those undertaking the research and the farmers who make production decisions.

12. Domestic farm policy must be made consistent with changing international developments.

Chapter 5: Wheat, Feed Grains and Oilseeds

The Task Force recommends the following with respect to wheat, coarse grains and oilseeds:

1. That the marketing of wheat remain under the jurisdiction of the Canadian Wheat Board.
2. That the Canadian Wheat Board be placed under the jurisdiction of the Minister, Department of Agricultural Industry.
3. That Canada make no further concessions under the International Grains Arrangement until they are matched in full by other countries. Canada has suffered serious losses since the summer of 1967 by making unilateral sacrifices to bring into being and to sustain the International Grains Arrangement.
4. That a Transition Policy be established for wheat and barley commencing in the spring of 1970; that wheat acreage diversion payments amounting to \$81 million for 1970 and \$58 million for each of the two following years be used to reduce wheat acreage in the Prairies to 15 million acres until 1973; that a barley acreage diversion payment of \$21 million be used for one year only to reduce barley acreage to six million acres in 1970; that delivery quota acreages be set at 56 per cent of the average of 1968-69 acreage for wheat and at 65 per cent of the average 1968-69 acreage for barley for the period during which the Transition Policy operates; that the program be administered by the Agricultural Stabilization Board.

5. New Marketing Guidelines for Coarse Grains

That the Canadian Wheat Board continue to be responsible for all commercial purchases of barley and oats from the primary producer but that:

- (a) each purchase by the Wheat Board should be hedged in futures market at the time of the purchase or as an alternative, provision should be made by the Board to hedge daily a certain quantity of coarse grains in the futures market;
- (b) all coarse grains produced in a given crop year should be sold during that period with the exception of a normal Wheat Board operating carryover, the size of which should be announced each October by the Wheat Board;
- (c) all oats and barley delivered by the farmer should be accepted by the Wheat Board whenever offered except where delivery quotas are used in which case such quotas should be lifted entirely in May of each year;
- (d) the price paid to the producer should be a monthly pooled price.

6. *New Marketing Guidelines for Wheat*

That at the termination of the Transition Policy all wheat produced in a given crop year should be sold during that crop year with the exception of a normal Wheat Board operating carryover, that the C.W.B. follow a more flexible pricing strategy, that "initial" prices be set low enough to permit price flexibility throughout the crop year; that prices paid to the producer for wheat should continue to be annual pooled prices; that delivery quotas continue to be used to provide for the orderly flow of wheat to the market throughout the crop year; that the basis for the delivery quotas be "wheat acreage" rather than "specified acres" as used at present.

7. That the practice of setting initial prices for barley and oats should be discontinued as soon as the proposed Prairie Grain Price Stabilization Program is introduced.
8. That a Prairie Grain Price Stabilization Program be instituted as soon as the current grain surpluses have been reduced to manageable proportions under the Transition Policy; that grain producers be provided under the Grain Price Stabilization Program with a minimum price support at a level equivalent to 80 per cent of the average of the local Wheat Board final prices for the preceding ten-year period; that the prescribed price support be applied to a calculated yield of wheat, oats and barley on one-half of the farmer's base acreage (average for the preceding three years) for each of those crops; that a revolving fund in the amount of \$100 million be available for payments under the Program if prices fall below the prescribed minimum price support.
9. That the Temporary Wheat Reserves Act, The Prairie Farm Assistance Act, and the Prairie Grain Advance Payments Act be discontinued and that the monies normally used under these Acts be used to help underwrite initially the Transition Policy and following that the Prairie Grain Price Stabilization Program. The Program should make any future emergency programs unnecessary.
10. That the grain delivery quota system be used, if used at all, primarily as an instrument to facilitate the movement (within a given crop year) of grades of grain required by the market and to provide for the equitable treatment of farmers unable to deliver grain during any specified period of time within a given crop year.
11. That a protein-system of grading for wheat be established as soon as feasible; that a market-justified price premium for protein content be established; that guaranteed protein levels be established for export wheat; that land-use policies be developed to encourage the production of high protein quality wheat.

12. That the freight subsidy of feed grain movement from the Montreal freight zone into Eastern Quebec and the Atlantic Provinces be discontinued by August 1, 1970; further that the Federal Government make direct payments to the five provincial governments i.e. Quebec, Prince Edward Island, New Brunswick, Nova Scotia and Newfoundland of the equivalent of the average payment made over the past three years on all shipments beyond the Montreal freight zone. These payments should be used on projects designed to strengthen the agricultural sector in whatever way the five provincial governments see fit, e.g. transportation or adjustment subsidies. These payments to the provincial governments should be a fixed annual sum for a period of five years commencing in 1970 and should then be gradually reduced for a further period of five years with a complete discontinuance of the subsidies by 1980.
13. That the feed freight subsidy from the Prairies into British Columbia and as far as the Montreal freight zone be removed by August 1, 1970. The same recommendations should also apply to Ontario corn.
14. That the tariff on American corn be replaced by a variable import levy which would apply whenever free market corn prices in the United States fall below the United States floor price. If the support price were \$1.05 and the free market price 95 cents per bushel, the variable import levy would be 10 cents. This would provide protection against serious distress prices for Canadian corn growers.
15. That the present marketing system for flaxseed, rye and rapeseed be maintained and that more flexibility be provided for storage of rapeseed at the Vancouver port.
16. That the Federal Government and the three Prairie Provinces jointly review the policies relating to the development of new lands and land clearing projects with the objective of preventing, wherever possible, the introduction of new lands for agricultural production at least until 1980.

Chapter 6: Livestock and Poultry

1. Governments and producers should accept as a target the export of 500,000 feeder cattle per year by 1980 and the production of enough beef and veal to meet Canadian consumption demands in full. Federal and provincial programs of research, extension and credit should take this objective into account.

2. Canada should initiate discussions to remove *all* tariffs on cattle and beef in order to achieve a completely free continental market.

3. Dairy farmers in Quebec and Ontario (particularly in Quebec) should consider carefully the desirability of retaining calves which are now sold at low weights in order to produce heavier veal animals or feeders. Which of these alternatives should be followed will vary from time to time and will be determined by relative prices and the availability of other opportunities for income.

4. The Task Force commends the fact that discussions are currently underway concerning beef grading and recommends continuing review.

5. The Federal Government should direct some of the funds currently made available through the Temporary Wheat Reserves Act for payments to encourage diversion of resources from grain to cattle production.

6. The Canadian Dairy Adjustment Commission should include positive incentives for milk producers to move into beef production. These are discussed in greater detail in Chapter 7 on Dairy.

7. There should be no change in tariffs on poultry and eggs.

8. Tariffs on feed and on equipment used in producing and processing livestock and poultry should be eliminated. Details are given in the Appendix to Chapter 4, International Trade.

9. Any moves in the direction of national marketing boards for poultry or eggs must be scrutinized with the greatest care to ensure that it does not reduce efficiency. This subject was discussed in considerable detail in Chapter 12, Marketing Boards.

Chapter 7: Dairy

1. The Canadian Dairy Commission should be renamed the Canadian Dairy Adjustment Commission. Its objective should be to assist milk producers to adjust their dairy enterprises so that the latter become profitable without extensive subsidies *or* to assist milk producers who have little prospect of financial success as dairymen to phase out of milk production and into other operations with the least possible personal and social dislocation.

2. The C.D.A.C. and provincial regulatory bodies must provide the kind of economic climate for processors and others involved in the dairy industry so that marketing efficiency may be improved. Such measures include:

- (a) programs to bring about more stable milk production, especially seasonally,
- (b) ending those regulations that inhibit the expansion and merger of processors and distributors.

3. The C.D.A.C. should announce its general programs at least five years in advance including ranges of prices or physical targets to provide flexibility in the later years. Quota policies and payments should be made explicit for a five-year period in order to allow rational planning and action.

4. The C.D.A.C. should revise its subsidy eligibility quota policy as follows:

- (a) All holders of quotas should be offered a cash payment and if they accept, their quotas should be retired by the C.D.A.C. A payment of two or three times its current annual value is suggested.
- (b) All quotas not retired by purchase should be made openly negotiable. There should be no upper limit to the amount of quota held by any one producer. The lower limit should be raised from the current 12,000 pounds to 30,000 in 1970-71 and progressively higher in subsequent years. This program should be announced in early 1970.
- (c) The unit value of direct payments should be reduced progressively so as to disappear in 1976. The unit values per year and the terms under which quotas may be held and exchanged should be announced during 1970 for each year until they are phased out in 1976.
- (d) The objective should be for C.D.A.C. to be out of its present subsidy programs by 1976.

5. The C.D.C., which has been buying skim milk powder at 20 cents per pound and exporting it at five to eight cents, should make powder available to livestock feeders at prices competitive with substitute ingredients. Presumably the C.D.A.C. would have to denature the powder by using a harmless vegetable dye and thereafter might sell it at prices close to those net prices currently received in export markets.

6. No public funds should be made available (with or without subsidy) for the expansion of skim milk powder processing facilities until the serious oversupply of powder has been overcome. Economic opportunities are available, however, for the production of specialty cheeses and limited assistance for initiatives in this direction should be considered.

7. Some of the funds currently made available to the C.D.C. should be used by the C.D.A.C. to provide positive encouragement for dairy farmers who wish to enter beef cattle production. These would take the form of adjustment grants during the two years or so required to establish a beef operation. Other assistance might take the form of temporary subsidies for artificial insemination by beef breeds. The principle here is the same as that enumerated in Chapter 5, Wheat, Feed Grains and Oilseeds in which the Task Force recommends that funds currently used under the Temporary Wheat Reserves Act should be used to promote adjustment from wheat production to forage. In addition, there are some areas in which assistance to dairy farmers who have profitable opportunities in cash crops would be justified.

8. The level of price supports for butter and cheddar cheese should be continued at current levels for several years but the offer-to-purchase level for skim milk powder should be reduced progressively each year until it is considerably closer to international prices. Since per capita consumption of

butter in Canada is responsive to price, some of the reductions in expenditure on skim milk powder might be used to reduce the price of butter to consumers through a deficiency payment. It appears that the result of all of these adjustments could be a shortfall in butter production relative to consumption at prices to farmers of about 65 cents per pound. If this occurs the Task Force recommends that the C.D.A.C. stabilize the price at about 65 cents per pound by importing butter and selling it at 65 cents. The profits so derived should be used to promote adjustment in the industry or out of it.

9. Other provinces ought to give serious consideration to adopting the fluid milk quota systems (including methods of transferring quotas) currently followed in Ontario and British Columbia.

10. Provincial and regional milk marketing boards should discuss with provincial departments of education the feasibility of initiating school milk programs in certain municipalities. A national policy concerning school milk programs is ruled out on constitutional grounds.

11. All provinces should abolish resale price control on milk.

12. Increased emphasis on programs such as milk recording (perhaps by Provincial Marketing Boards) and mastitis control is desirable in order to reduce costs of production at the farm level. Many Canadian milk producers are extremely efficient, using their resources skillfully and keeping abreast of scientific developments related to their industry. There should never be any doubt raised in the minds of such people that they contribute productively to the well-being of the nation. It is a great responsibility for provincial extension specialists, for credit agencies, for marketing board officials and for the C.D.A.C. to ensure that more farmers move into this elite of low-cost efficient operators and that facilities and information be provided to keep them highly productive. Recent trends have been in the right direction, with rapidly increasing output per enterprise. Expansion of bulk hauling and raising of milk quality standards will speed this desirable trend; those without milk coolers have little place in a modern industry. The dairy industry has a number of years of rapid transition ahead of it and the speed of transition should remain almost that of the last three years.

Chapter 8: Fruits and Vegetables

The Task Force recommends that:

Potatoes

1. The Federal government take the initiatives necessary to ensure that free trade in potatoes be established between Canada and the United States, and that adjustment assistance be provided to farmers who would be adversely affected by free trade.

2. Producer marketing boards be used for potatoes in Prince Edward Island and New Brunswick.
3. Assistance be provided for rapidly re-structuring potato farms in New Brunswick and Prince Edward Island to larger-sized units. This could be achieved through Regional Economic Expansion plans.
4. Grading of potatoes be based on objective standards other than visible characteristics; and grading be rigidly enforced in all provinces.

Apples

5. Marketing board controls be used in Nova Scotia and Quebec; and the programs of producer marketing agencies in the four major producing provinces be co-ordinated.
6. Nova Scotia orient its marketing policies toward penetration of the United States market.

Other Vegetables

7. The Canadian government seek free trade arrangements with the United States on carrots, onions, turnips, cole crops and cranberries.
8. Producer marketing controls over fresh vegetables be established in the Province of Quebec; and assistance be provided for expansion of vegetable production in the Montreal area and on the organic soil areas along the United States border south of Montreal.

Dumping and Injury

9. Negotiation be initiated with the United States respecting the introduction of objective standards for the application of quick relief against dumping and/or injury from low priced imports.

Marketing Boards

10. In general terms, marketing boards place more emphasis on market development and that these boards improve management practices by employing highly skilled marketing specialists.

Processing Industry

11. The Federal government broaden its program of economic incentives which could encourage all sectors of the processing industry to exploit every economically feasible export opportunity.

Crop Insurance

12. While endorsing crop insurance schemes under the Crop Insurance Act of 1960, consideration be given to making crop insurance available for potatoes, apples and other products on a national basis. Such

schemes would, of course, require actuarial soundness within each province or sub-region of a province.

Marketing

13. That growers, the marketing sector and governments move rapidly to modernize marketing structures and the performance of marketing functions. This will require a great expansion of marketing research with an emphasis on market development.

Chapter 9: Other Crops

PART A: TOBACCO

The Task Force therefore recommends that:

1. Tobacco growers, processors and manufacturers, the Federal government and interested provincial governments join in the creation of a tobacco export development fund. This would support an aggressive export trade development program. Intensive exploitation of export market opportunities, involving the use of trade missions, trade fairs and where advisable, the use of export subsidies in a market development context, should be used.
2. The Ontario Flue-cured Tobacco Growers' Marketing Board reduce the "basic marketable acreage" of growers who under-plant allotted acreage. Such basic acreages accruing to the Board could be sold on a tender basis.
3. The Ontario Board should continue, on a permanent basis, the provision in its program which now permits transfer of acreage allotments from less productive to more productive areas.
4. Maritime growers should form an organization which would permit a "check-off" to allow participation in the export development fund operations.
5. Maritime growers should take the action necessary to ensure that primary processing facilities are available in that region.
6. Intensive research into the production and manufacture of tobaccos that can be readily marketed under the demand conditions, including consideration of effects on health, of the 1970's be undertaken and supported by government, the manufacturing industry and tobacco growers.
7. A Federal government inter-departmental committee be created to make a continuing assessment of the effect of anti-tobacco activities of the Federal government, and consider a program of adjustment assistance for the industry, if required.

PART B: SUGAR BEETS¹

The Task Force agreed to inclusion of the foregoing description of the Sugar Beet Industry in this Report but could not reach a consensus on conclusions and recommendations. Dr. MacFarlane dissented and his recommendations are shown in footnote 1 below.

PART THREE

INSTITUTIONAL STRUCTURE OF AGRICULTURE

Chapter 11: Government; Agribusiness; Farmer Organizations

1. The primary and continuing role of governments should be to produce a desirable economic and social climate for farmers and agribusiness. Economically, governments should promote the efficient use of resources through their support for research, extension, education, marketing services and from time to time, through legislation or funds to increase or stabilize prices and incomes. This role does not include “managing” agriculture any more than it is the role of governments to “manage” the steel industry or the pulp and paper industry. Because the firms in farming are smaller than in other sectors, the kinds of government services required to create a desirable climate for them will be different from those of other sectors.

There are social as well as economic aspects to all policies. Governments and their officials must always be aware that they are dealing with human beings and not with abstract problems. Programs which call for changes in the way of life of the poor, the disadvantaged and the aged in particular, must reflect this point.

2. *Flexible Approach to Policy Making.*—Experience indicates that a doctrinaire approach to the development of agricultural policy is unsound. The diverse and dynamic conditions of Canadian agriculture make a pragmatic approach desirable. This flexibility appears again and again in our recommendations.

3. *Stated Goals.*—The controversies which surround many agricultural policies and programs arise in large measure from their lack of clearly defined

¹ Recommendations for the Sugar Beet Industry proposed by Dr. MacFarlane:

- (1) that the Federal government limit deficiency payments to growers who have received them in a recent period; and that payments to any grower be limited to production by that grower in a recent past period, except as in (2);
- (2) the Federal government be authorized to buy existing rights to deficiency payments. This would parallel the adjustment assistance payments made to farmers when the beet sugar factory in Chatham, Ontario was closed. The government would be authorized to sell or allocate such rights to deficiency payments in such a way as to improve the structure of the sugar beet sector;
- (3) the level of deficiency payments be gradually scaled down as the industry restructures toward fewer, larger-scale, more efficient production units.

goals. The Task Force recommends that for each of its policies and programs, governments provide a clear statement of goals; such statements should be so explicit and sufficiently quantified that the degree of success in achieving them can later be measured. Goals should not be stated in such general terms as "to improve the welfare of farmers". These goals, and performances in achieving them are considered in Recommendation 14(b)

4. *Recognition of Commercial Low-Income Division.*—Programs which try to serve the interests of commercial farmers and to meet the problems of poverty-level farmers are unlikely to be as successful as separate (but coordinated) programs designed to serve each. The Task Force recommends that this distinction be kept in mind in all policy making. The government should not confuse economic and welfare problems and programs to overcome them.

5. The Canada Department of Agriculture should be renamed the Department of Agricultural Industry. All of its planning and operations for commercial agriculture must be integrated around a central concept of a profit-oriented, self-sustaining industry serving the needs of all its major stakeholders adequately and fairly. A major function of the Department of Agricultural Industry would be to integrate all direct Federal government expenditures on agriculture through a centralized budgetary control system.

6. Overall authority and responsibility for commercial agriculture at the national level must be centred in and around the Department of Agricultural Industry.

7. The Economics Branch should be renamed the Economics and Business Branch. An Agribusiness unit should be created within the Branch to undertake research and analysis of problems relating to agribusiness. Its staff should be drawn from those specialists undertaking similar work in the Department of Industry Trade and Commerce.

8. The Minister of Agricultural Industry should request the heads of the Research Branch and of the Economics and Business Branch to produce a joint proposal which will indicate the kind of machinery necessary to ensure co-ordination of research efforts between specialists in the two branches.

9. A new International Trade Branch should be created in the Department of Agricultural Industry and many of its staff drawn from the Department of Industry Trade and Commerce.

10. A new Federal-Provincial Agricultural Credit Board should be created. At the Federal level it should report to the Minister of Agricultural Industry. (See Chapter 13)

11. The Canadian Livestock Feed Board should be phased out if the recommendations of Chapter 5 are implemented.

12. The Agricultural Stabilization Board should be given additional responsibilities in the form of the new Prairie Grain Price Stabilization Program and the short-run emergency Wheat and Barley Acreage Diversion Program.

13. A new National Agricultural Marketing Board should be created, to take direct responsibility for all statutory national or federal marketing boards including the Canadian Wheat Board and the Canadian Dairy (Adjustment) Commission. (See Chapter 7 for change in C.D.C.) The N.A.M. Board should be created by the Minister of Agricultural Industry and bear a relationship to him similar to that of the Ontario Farm Products Marketing Board to the Ontario Minister of Agriculture and Food.

14. A new National Agricultural Advisory Council should be created by the Minister of Agricultural Industry. It should have the following functions:

- (a) to act as the highest level farmer and agribusiness council, providing a forum for discussion and providing advice both to the Minister of Agricultural Industry and to the N.A.M. Board;
- (b) to organize and sponsor an annual *Policy Evaluation Conference* based upon intensive studies by independent researchers of a small number of existing programs of the Federal Government or of joint Federal-provincial programs. Further to Recommendation 3, the goals of the programs evaluated should be clearly and specifically stated.

15. Creation, by the N.A.M. Board, of commodity councils similar to the Canada Grains Council to act in an advisory capacity to the N.A.A. Council and also to their corresponding statutory marketing board (e.g. Canada Wheat Board).

16. The new structure of organizations proposed in the preceding recommendations should make possible vastly improved communication between all three of government, farmer organizations and agribusiness. The concept of the N.A.A. Council and the commodity councils involves participation by agribusiness and farmer organizations.

The Task Force recommends emphatically that the creation of councils should not prevent agribusiness or farmers from communicating directly with government or with one another. The Task Force further recommends that governments consult as often as possible with the other stake-holders in the agricultural industry: for the government to do so, however, implies a corresponding degree of sensitivity and responsibility on the part of the non-government groups.

17. The Task Force takes no position on the issue of "unity" between the general farm organizations. The fact is that this is a matter for farmers themselves to decide and furthermore, the pro's and con's of a union appear to the Task Force to be evenly balanced.

18. Both Federal and Provincial governments should design short training programs to make government, agribusiness and farmer leaders and employees better aware of new techniques of management and administration. Management by objectives, program planning and budgeting and other techniques of rational management must be increasingly adopted to improve effectiveness and efficiency.

19. *Recognition of Regional Characteristics*—While the Task Force warns against the dangers of balkanization of Canadian agriculture and of agricultural policy and emphasizes that increased attention be paid to national unity, it recommends that increased attention be paid to regional problems and disparities during the formulation of policy. We commend in principle those parts of ARDA and Regional Economic Expansion which are adaptable to particular regional conditions and which work through training and similar assistance to help the disadvantaged eventually compete on more or less even terms with those in more prosperous areas.

Chapter 12: Marketing Boards

1. Legislation should be introduced by the federal government to permit the creation of national commodity marketing boards. The Task Force recommends that this legislation include:

(a) A National Agricultural Marketing Board, responsible to the Federal cabinet² and operating so as to benefit agriculture without serious adverse effects on the national economy.

(b) Appointments to the N.A.M. Board should be made by the Federal government and should be drawn from several walks of life.

(c) The N.A.M.B. should delegate powers and responsibilities to commodity marketing boards, scrutinize carefully the way in which these powers are used, and withdraw them when the "national interest" dictates.

(d) National commodity marketing boards may be of various structures and composition: some may be federations of provincial boards, some may be producer-controlled without provincial equivalents and some may be federally-appointed commissions.

It is important that the legislation permit the creation of commodity commissions similar in structure to the Ontario Apple Marketing Commission, with membership drawn from all groups who have a stake in the decisions to be made. No common kind of structure appears necessary.

2. The N.A.M.B. would require very substantial sums in order to undertake the appropriate research and reviews implied by its areas of responsibility.

3. If the N.A.M.B. permits any subsidiary commodity marketing board to impose quotas on inputs or sales, it should ensure that the method of doing so would freely permit the relocation of production in the lowest cost areas of the country. This virtually rules out the establishment of provincial quotas, but not of nationally negotiable quotas. Similarly the N.A.M.B. should prevent any barriers being raised against the holding of quotas by the lowest cost producers within an area.

²The N.A.M. Board would bear the same relationship to the Federal government as, for example, the Ontario Farm Products Marketing Board bears to the Ontario Government.

4. Since the commodity marketing boards may be expected to make proposals and to work in the best interests of their own members, it should be the responsibility of N.A.M. Board to take into account the interests of other sectors of the economy including those potential producers (who are not now producers) of the commodity in question.

5. The power to control imports should not be given to N.A.M.B. nor to any national commodity board.

6. There should be no attempt made to create one huge national all-encompassing body with widespread controls on output.

7. Provincial governments should continue to resist the temptation to introduce grading and quality regulations aimed at reducing interprovincial trade.

Chapter 13: Credit

1. A Federal-Provincial Agricultural Credit Board should be created, with membership from, and responsibility to the Federal and provincial governments. Participants in the Board on behalf of the Federal Government should be responsible to the Minister of Agricultural Industry. (See Chapter 11).

2. The Board should develop and take responsibility for a joint Federal-provincial credit system for commercial farmers. Under this system the Federal Government would provide 75 per cent of the required capital funds and pay one-half of the administration costs; the provinces should provide the remaining 25 per cent of the required capital funds and pay one-half of the administration costs. The provincial governments should be directly responsible for the administration of the proposed credit programs and the respective provinces should guarantee one-half of any capital losses incurred by the Federal government in the operation of the credit program in that province. The overall policy, operating guidelines and administrative procedures should be developed jointly by the Federal and provincial governments. The existing Federal and provincial credit institutions should be modified as necessary and incorporated into the proposed joint Federal-provincial credit system.

3. The Federal-Provincial Agricultural Credit Board should proceed to develop an insured mortgage credit program with the objective of inducing commercial lending institutions to enter the farm credit field.

4. The joint Federal-Provincial Agricultural Credit Board should assume the responsibility for the development of a "guarantee against loss" type of lending program such as that which now exists under the Farm Improvement Loans Act.

5. The administration and responsibility for the Veterans' Land Act credit program should be transferred to, and merged with, the proposed joint Federal-Provincial Agricultural Credit Board.

6. The Farm Improvement Loans Act should be discontinued and the functions now performed by the F.I.L.A. transferred to, and become the responsibility of, the proposed Federal-Provincial Agricultural Credit Board.
7. The commercial banks should continue to be primarily responsible for the provision of operating credit to farmers and the banks should:
 - (a) develop strong agricultural departments,
 - (b) place a greater emphasis on "farm management loans" as opposed to the traditional "security" approach to farm lending,
 - (c) integrate as closely as possible with government mortgage credit program,
 - (d) establish closer links with farm management extension agencies.
8. Agricultural extension departments should provide continuing short courses for farmers on topics relating to the use and management of credit.
9. The proposed CANFARM (i.e. electronic data processing of farm records) program should be instituted and developed as rapidly as possible.
10. Insofar as possible governments should avoid the subsidization of interest rates. If, for a special reason, interest rates are to be subsidized, the loaning agency should attempt to ensure that there is no direct or adverse effect on the commercial lending institutions involved in the field of farm credit. If subsidized interest rates are used, the cost of the subsidy should be borne entirely by the respective provinces.
11. Governments, both Federal and Provincial, should press for all interest charges to be expressed as simple interest rates.
12. As a special subsidiary to the Federal-Provincial Agricultural Credit Board, a Rural Development Credit Agency should be created. The Agency's attention should be devoted entirely to providing credit to non-commercial low-income farmers. Its operation should be flexible—in some cases coordinating, in others filling gaps—in order to ensure that there is a minimum of duplication and omission among existing programs relating to the poverty sector in agriculture. The Agency should count as its successes, those loans and assistance which result in a farmer graduating to commercial credit terms.

Chapter 14: Crop Insurance

The Task Force recommends the following:

1. The immediate discontinuance of the P.F.A.A. program.
2. The equivalent of the annual subsidy paid to the P.F.A.A. program by the Federal Government should be allocated to the financing of the Prairie Grain Price Stabilization Program (see Chapter 5).

3. An independent body should be appointed by the National Agricultural Advisory Council to evaluate the actuarial structure of the crop insurance program in Canada and make the results of such an evaluation known annually at the proposed national policy conference outlined elsewhere in this Report.
4. In 1975 a Federal-Provincial committee should appoint an independent body to make a comprehensive evaluation of the effectiveness and efficiency of the crop insurance program and, in particular, to recommend on whether or not the current subsidy should be continued.

Chapter 15: Research

The Task Force recommends:

1. That the amount of resources devoted to agricultural economics research in Canada be doubled within the next five years.
2. That the Canadian Wheat Board proceed immediately to develop a strong marketing research department.
3. That the national farm organizations be encouraged to develop an adequate research staff for the purpose of conducting studies and investigations relating to agricultural marketing and policy matters; that serious steps be taken by the Federal Government and the Wheat Board to meet the repeated request of western grain producers to have a deduction made on their grain sales through the Wheat Board to support producer-sponsored research.
4. That all provincial marketing boards be encouraged to develop strong programs of research relating to their particular problems and policies.
5. That the proposed Economics and Business Branch of the Department of Agricultural Industry develop a continuing program of commodity marketing research.
6. That a great deal more emphasis be placed on market-oriented commodity research in the Research Branch, Department of Agricultural Industry.
7. To ensure that the commodity marketing research of the Economics and Business Branch is closely integrated with the work of the scientists and engineers of the Research Branch, it is recommended that the heads of those two branches be requested by the Minister, Department of Agricultural Industry, to produce a joint proposal for the development of machinery to bring about the necessary co-ordination.
8. That the Economics and Business Branch of the Department of Agricultural Industry develop a strong program of research relating to the agricultural business sector of the Canadian economy.

PART FOUR

LOW-INCOME SECTOR

Chapter 16: The Low-Income Sector

1. *Strengthen the Manpower Services Available to Farmers.*—Fortunately the naive laissez faire position concerning low-income farmers “If they cannot make a good income in farming, let them do something else” has become discredited. It is in the national interest to help at least some of them become capable of doing something else and to help the remainder avoid living in poverty and indignity. Specific proposals to assist low-income farmers include:

- (a) The creation of 10 mobile clinics in 1970-1971 in order to improve the “reach” of the Manpower program by taking to rural people the services which are now concentrated in urban centres. The mobile clinics are useful in several ways. They provide information on jobs, training opportunities and urban housing and access to a full range of counselling services both in rural communities and (for those who move) in receiving centres. The mobile clinics should also call at rural schools in order to discuss careers and point out the relevance of mathematics, language and other subjects to the jobs of the 1970’s and 1980’s. It cannot be stressed too often that with a working life of 45 years, a young man of 18 can condemn himself to poverty by not devoting a few more years to improving his qualifications as a worker. Mobile clinics need not be large; they might cost \$100,000 each per year.
- (b) The creation of small offices in major cities to help those who move to find housing, to be aware of social services available and to solve family problems arising out of the move from rural areas into major urban centres. Close co-ordination will be required between the mobile clinics and the existing Manpower centres on the one hand and the proposed major city offices on the other.

2. *Higher Levels of Employment.*—The extension of training and mobility services also presupposes that jobs are available somewhere. Merely to increase the number of rural clients will do little good if unemployment rates are high in cities. Policies which can create new employment opportunities are absolutely fundamental to war on poverty. Canada’s record toward achieving the goal of full employment since 1954 has been poor; only in 3 years (1956, 1965, 1966) has less than 4 per cent of the labour force been unemployed. This poor employment record makes the 55 per cent decline in the farm labour force between 1946 and 1968 all the more remarkable.

3. *Improved Education.*—Although educational disparities between farm and city and among regions are not new, what is new is that unskilled

labour—the traditional route out of agriculture—confronts a declining demand. The changing nature of labour force demand requires higher levels of education among rural people.

The alternative is to continue to suffer the ill-effects of an indigestible surplus of under-educated and inadequately trained, both in urban centres and trapped on the farm. While it is essential to distinguish between formal education arising from the municipal-provincial school system and skill training provided by Manpower, both are necessary to meet the problems of poverty. While all provinces are making efforts to improve rural education, it is doubtful if the poorer provinces can spend enough to help. Even the wealthier provinces are disinclined to commit resources on the necessary scale. The need is not merely for larger school units or higher salaries but for whatever it takes to raise aspirations and make rural students more nearly competitive in the labour market. This accounts for the proposal to create mobile Manpower clinics which would visit schools in order to discuss careers and education.

4. *Welfare and Social Services.*—Except for programs with universal coverage such as family allowances and old age security, present welfare services tend to serve the farm population much less well than city people. Unemployment insurance, for example, does not apply to farmers; health services are mostly poorer and disability allowances harder to obtain; many families live on provincial or municipal welfare at bare subsistence levels and in many districts the welfare budget is not adequate to cover all families in need. Because of feelings of independence or lack of knowledge of what is available, low-income farmers receive much less welfare assistance than low-income city folk. A Saskatchewan economist states that his province has 15,000 to 20,000 low-income farmers but less than two dozen on welfare. To ensure that welfare, health and other social services are actually made available to rural poor, the Task Force suggests welfare officers be designated in each county or equivalent in order to indicate the services available. The direct result of this proposal is increased welfare payments.

5. *Guaranteed Annual Income Plan.*—A variation of the guaranteed annual income plan is the negative income tax scheme proposed in the United States. The negative income tax would eliminate many existing welfare schemes. Under one system suggested all individuals and families whose incomes are too low to pay income taxes would receive a payment amounting to one-half of their unused exemptions and deductions from the Treasury. Variations on this basic proposal have become fairly common. "Schemes of this sort provide and confine income transfers to households which really need economic assistance; condition payments solely on the basis of family income and family size, thus achieving a degree of equity in the treatment of low-income households not achieved by existing income transfer programs; are more neutral with respect to resource allocation, might stimulate incentives to work".³ The incentive to work is built into the negative income tax

³ Christopher Green in *Conference Report*, Canadian Tax Foundation, 1967.

plan through a rate structure which assures that no individual or family could be financially better off by avoiding employment.

A negative income tax program would embrace all sectors of the economy and not just agriculture and must be considered in that context. A universal system has several advantages but does not necessarily mean more help for poor people than could be had from filling the gaps in present services. It is not necessary, therefore, to await the results of studies now in process which may or may not lead to the implementation of the negative income tax; the important thing is to improve services and increase coverage in rural areas, immediately and until such time as a better system is devised.

6. *Small Changes for Older Farmers.*—There are many older farm people for whom inability to other locations and occupations is undesirable. The Task Force is of the opinion that in the interests of dignity and self-respect for the individual, it is desirable to keep the welfare sector as small as possible and that the naive view that they "ought to do something else" is untenable. It may be quite inefficient to provide retraining and moving expenses and incur all the personal and social problems involved, for a few years of higher wage employment. All things considered—the poor prospects for other employment, the importance of pride and independence and the fact that whatever skills and experience these men possess are as farmers—it may often be the "best solution" to seek small improvements in farm income.

It is plainly not feasible to raise every submarginal farm to commercial status, nor is it advisable to attempt too much improvement—for example, to encourage large and costly additions to acreage, where management is weak and the life expectancy of the farm unit perhaps no more than 10 or 15 years. Certain types of improvements involve costs that are high relative to the benefits which can reasonably be anticipated, as ARDA has shown. The technique should be to provide assistance which can bring about small changes, perhaps a change in the crop pattern or a little added land; improvements in organization leading to lower costs—minor improvements which would provide a small boost to incomes (a few hundred dollars, on the average) but requiring no large investment outlays. This policy is an exception, it is one that includes transitional programs for older farmers only. Guarantees must be set up to ensure younger farmers are and remain excluded from these special efforts.

The major input required from governments is the supply of advisory services. The Task Force envisages: extension workers specially trained to deal with the lower levels of farming; to provide advice and encouragement on an individual farm basis and short-courses in the community, tailored to the needs of farmers not reached by existing programs. A few tentative steps along these lines have been taken in certain provinces (for example, in the FRED plan for eastern Quebec). Wider application raises at once the problem of availability of staff but it appears that the job does not have to be done by professionals. Alberta has used district farmers for advisory tasks in the Edson district; a spokesman for Manitoba's Department of Agriculture

claims one of their most successful programs has been short courses given in local districts using "diploma course" graduates. The latter, it is felt, make better connections with small farmers than highly trained university graduates. The experience in eastern Ontario has been successful by operating on the same basis.

A major advantage of the above approach is that for the first time there would be staff with the responsibility for ensuring that programs do get to poor farmers who would be best off remaining as farmers.

7. *Community Approaches*.—Since net farm income is now only 5 per cent of national income, the Canadian economy can tolerate some inefficiency in the form of small-scale farmers. What cannot be tolerated is the bringing up of succeeding generations who are grossly handicapped for anything but a diminishing number of low-skill jobs. While young adults are leaving the rural areas in large numbers, it cannot be assumed that all are successfully absorbed in the urban labour force.⁴ Because educational standards are low, the presumption is that many secure a precarious foothold and that many come back.

The measures proposed above will assist farm families but not the communities where so many of these families live. "Terminal" aid for small farmers and enlarged welfare programs can hardly supply the tax base for radical improvements in education and other community services, yet such improvements are essential to improve the chances for the children of rural poor. Measures to encourage out-migration, though desirable, intensify the problems of poor communities in that they remove customers of village merchants, and lower the basis groups. These are the reasons why effective programs for rural poverty must include a community as well as an individual approach.⁵

Comprehensive planning of the FRED type offers a number of promising leads; money for schools and roads; counselling services to acquaint people with alternatives; closing out of settlement in areas with no potential; strenuous efforts to increase employment in selected growth centres. This is a start but only a start—so long as comprehensive planning is confined to a few FRED areas in eastern provinces and an even smaller number of special development areas under ARDA. After all, the poorer districts in Ontario and the Prairies contain three times as many low-income farms as the whole of the Maritimes.

While not suggesting that FRED be extended to all rural areas containing poverty, the fact is several key programs which account for much FRED expenditure are already operational—Manpower mobility; incentive grants; in

⁴ A recent survey of several parishes in the Gaspé and rural New Brunswick reported that only three of every ten offspring of rural families have moved to an urban place. "Given the large-sized families this means a high retention of offspring from such families in rural areas". Jane Abramson, *Barriers to Population Mobility*, *op. cit.*

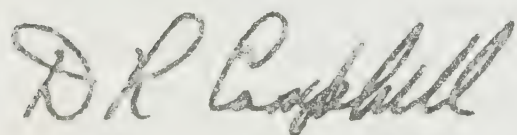
⁵ "A firm government commitment to effective Manpower policies should be coupled with a firm commitment to share the financial burdens of maintaining a high level of social services, so that the unfavourable effects of out-migration will not be allowed to dissipate the gains from the adjustment process." Buckley and Tihanyi, *op. cit.* page 23.

some cases, land consolidation. Outside the FRED areas these programs operate without a framework of research and planning to indicate what the long run goals for the community should be and without community participation in selecting goals and means. Co-ordination of efforts among programs is likely to be minimal, and the response from people who do not understand or approve the programs may leave something to be desired. There must be increased co-operation and co-ordination among programs and government institutions in areas not covered by FRED.

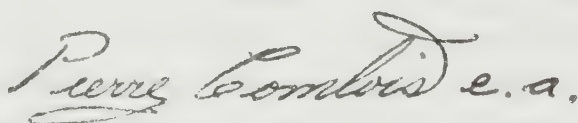
8. *Publication of Research*—ARDA has spent considerable sums on research concerning community needs and development possibilities but apart from a few reports, most of the research work has not been published and is unavailable. This is a mistake.

9. *Special Rehabilitation Programs*—Because all people are not capable of rapid absorption into the labour force, there must be provision in a few areas for special longer programs for those younger people who fail to meet the requirements of general and vocational training programs.

The analysis and recommendations of the Federal Task Force on Agriculture, as contained in this Report, are respectfully submitted for your consideration.



D. R. Campbell



P. Comtois



J. C. Gilson



D. L. MacFarlane



D. H. Thain

part six

APPENDICES

APPENDIX A

MATERIAL RELATING TO THE ESTABLISHMENT OF THE FEDERAL TASK FORCE ON AGRICULTURE

The Honourable J. J. Greene then Minister of Agriculture, recognizing the complexity and emergency of the economic state of agriculture in Canada in this period of rapid change proposed the establishment of a Federal Task Force, composed of specialists in the field, to make a critical review of this industry.

On 17 April 1967, the Cabinet agreed in principle that "... a Task Force be appointed to make a comprehensive assessment of agricultural goals and policies, on the understanding that its terms of reference would be submitted to the Cabinet after the head of the Task Force had been appointed." The recommendation was for the appointment of five full-time commissioners under Part I of the Inquiries Act. This Task Force would be charged to deliver a report by 1 September 1968.

It was found, after a thorough, full and long survey of the field that it was impossible to obtain the services of five qualified persons for a full year on such short notice. As a result it was decided that five part-time commissioners would be appointed and one or two persons would be added to the group to serve as full-time co-ordinators.

On 22 September 1967 the following five Canadians were named as the members of the Task Force:

Dr. David L. MacFarlane,¹ professor and Head of the Department of Agricultural Economics at Macdonald College of McGill University.

Dr. J. C. Gilson, professor and Head of the Department of Agricultural Economics (and later appointed Dean of Graduate Studies) at the University of Manitoba.

Mr. Pierre Comtois, partner of Bélanger, Saint Jacques, Sirois, Comtois and Company, Chartered Accountants, Sherbrooke, Québec.

Dr. D. R. Campbell, professor of political economy at the University of Toronto.

Dr. D. H. Thain, professor of business policy at the School of Business Administration, University of Western Ontario.

The provision was also made on 17 April 1967 for setting up of an inter-departmental committee² with representation from the Departments of Agriculture, Forestry³, Finance, Manpower and Trade and Commerce⁴, the Treasury Board, the Economic Council of Canada and the Privy Council for the purposes of:

1. reviewing and making recommendations on the terms of reference proposed . . .;
2. making recommendations with respect to the membership of the Task Force,
3. on a continuing basis, assisting the Task Force in its work.

¹ Professor MacFarlane was selected as Chairman (for internal purposes only) by the other members at the commencement of the work but agreed to sign the report as an equal member.

² See Appendix B-1.

³ Later to become part of the Department of Regional Economic Expansion.

⁴ Later to become the Department of Industry, Trade and Commerce.

During the summer of 1967, at the Conference of the Ministers of Agriculture, held in Montreal, a committee of five persons was established⁵ to serve as a link between the Task Force and the Provincial Departments of Agriculture.

As a result of meetings between the Task Force and the committees the terms of reference for the work were agreed as follows:

1. The Task Force will make a comprehensive assessment of Canadian agriculture in terms of its contribution toward the achievement of national goals. Particular recognition will be given to the income and welfare of farmers. In the above work, concern will be with the productivity of the agricultural industry in the context of the adjustments to new technology and maintaining the industry in a strong competitive position in domestic and international markets.
2. It will study and make recommendations concerning agricultural policies required to achieve long-range national and agricultural goals, taking account of the interests of farmers and consumers.
3. To accomplish the above objectives, the Task Force will use existing research results and conduct a series of research projects.

On 11 December 1967 the Task Force outlined a Work Plan and provided for the establishment of a Secretariat to be located in Ottawa. Initially the offices of the Secretariat were located at 48 Sparks Street, then moved to the Sir William Saunders Building at the Central Experimental Farm and again moved to 245 Cooper Street for the duration of the work. Two senior officers were contracted to provide full-time assistance to the Force. On 18 December 1967 Mr. A. Vaillancourt, formerly chief editorial writer of the Sherbrooke Tribune, was appointed and assumed the position of Secretary.⁶ Mr. Douglas Woodward was appointed Co-Ordinator and Executive Director of the affairs of the Task Force, on 1 January 1968.⁷ Other members of the Secretariat Research Staff were appointed for varying periods as required (see Appendix D).

A research program was agreed upon, proposals were solicited and contracts let during the first quarter of 1968, (see Appendix E).

⁵ See Appendix B-2.

⁶ Mr. Vaillancourt moved to Sherbrooke on 1 April 1969 to assist Mr. Comtois until 30 June 1969 when his contract was terminated.

⁷ Mr. Woodward was assigned the duties of Secretary on 1 April 1969 when Mr. Vaillancourt moved to Sherbrooke.

APPENDIX B

GOVERNMENT BODIES ASSOCIATED WITH THE TASK FORCE

1. *Federal: Inter-departmental Committee*

An inter-departmental committee was formed to serve as an advisory and consultative body to the Task Force. The list below shows the scope of the members within the Federal government establishment and this permitted the Task Force to readily contact a wide range of persons within the various departments in the course of the work.

The terms of reference for each study project were submitted to this committee for approval and comment. No major contract was formally entered into without approval from the inter-departmental committee and each report received from such approved projects was distributed to the members.

To further the liaison between the Task Force and this committee copies of the monthly progress report to the Minister of Agriculture were also distributed.

*Members*¹

Dr. R. Poirier	<i>Chairman:</i> Assistant Deputy Minister (Economics) Department of Agriculture.
Mr. H. W. Leggett	<i>Secretary:</i> Executive Assistant to the Deputy Minister of Agriculture.
Mr. H. G. P. Taylor	Director, Resource Programmes Economic Affairs, Industry, Tariffs and Trade, Department of Finance.
Mr. J. G. Threader	Programme Officer Treasury Board.
Mr. W. T. Burns	Department of Regional Economic Expansion.
Mr. M. G. Clark	Director General Office of Commodity Trade Policy, Department of Industry, Trade and Commerce.
Dr. R. J. Uffen	Director, Science Secretariat Privy Council.

2. *Provincial and Interprovincial*

In addition to separate meetings with provincial deputy ministers of agriculture and their staffs in the respective provinces the Task Force met with the Inter-provincial Committee on Canadian Agriculture Policy. The I.C.C.A.P. is formed of four provincial deputies representing B.C., Prairie Provinces, Ontario, the Maritimes and is chaired by Dr. E. Mercier of Québec.

The following is a list of provincial deputy Ministers of agriculture; members of I.C.C.A.P. are indicated by an asterisk.

Mr. A. H. Turner *	British Columbia
Dr. E. E. Ballantyne	Alberta
Mr. W. H. Horner*	Saskatchewan
Dr. J. M. Cormack	Manitoba
Mr. E. M. Biggs *	Ontario

¹ Due to departmental reorganization and personnel changes latest names only given.

Dr. B. Lavigne
Mr. M. W. White
Mr. R. D. Gilbert *
Mr. D. L. Parks
Mr. J. J. O'Reilly

Québec
Prince Edward Island
New Brunswick
Nova Scotia
Newfoundland

The monthly report to the Minister of Agriculture and copies of a research report were also sent to this group.

APPENDIX C

PERSONS DIRECTLY ASSOCIATED WITH THE WORK

1. *Task Force Members*

- Dr. David L. MacFarlane (Chairman)
Head, Department of Agricultural Economics,
Macdonald College, Ste. Anne de Bellevue, P.Q.
- Mr. P. Comtois, C. A., Partner in Bélanger, Sirois, Sainte Jacques et
Comtois, Sherbrooke, P.Q.
- Professor D. R. Campbell, Department of Political Economy, University
of Toronto.
- Dr. J. C. Gilson, Chairman, Department of Agricultural Economics and
Dean of Graduate Studies, University of Manitoba, Winnipeg.
- Dr. D. H. Thain, Professor in Business Administration, School of Business,
University of Western Ontario.

2. *Secretariat*

Senior Staff

- Mr. D. Woodward —Executive Officer and Co-Ordinator.
- Mr. A. Vaillancourt —Secretary.

Research Staff

- Mr. George Grant —Consulting Economist, Toronto.
- Mr. G. Boucher —Seconded from Canada Department of Agriculture.
- Mr. R. Deniger —Hydro-Québec.
- Mr. R. Erdmann —Economist, Toronto.
- Dr. C. Gislason —Economist, Washington, U.S.A.

Secretarial Staff

- Miss A. Horscroft
- Mrs. M. Dercola
- Miss J. I. Long

APPENDIX D

RESEARCH PROGRAM

1. *Research Program*

Early after formation of the Task Force a Work Plan and Research Program was formulated as follows:

1.1 *Work Plan*

- A. Set out Task Force objectives.
- B. Develop means to accomplish objectives.
- C. Develop evaluation criteria.
- D. Prepare a time schedule for operations.
- E. Establish a Secretariat, in Ottawa for the co-ordination and control of the work.

1.2 *Task Force Objectives*

The terms of reference for the work of the Force were:

1. The Task Force will make a comprehensive assessment of Canadian agriculture in terms of its contribution toward the achievement of national goals. Particular recognition will be given to the income and welfare of farmers. In the above work, concern will be with the productivity of the agricultural industry in the context of the adjustments to new technology and maintaining the industry in a strong competitive position in domestic and international markets.
2. It will study and make recommendations concerning agricultural policies required to achieve long-range national and agricultural goals, taking account of the interests of farmers and consumers.
3. To accomplish the above objectives, the Task Force will use existing research results and conduct a series of research projects.

1.3 *Research Projects*

As earlier indicated, the main work of the Secretariat was centred around initiation and contracting out of a comprehensive research program. The following is the schedule of projects, some of which were not pursued due to either inability to find competent authorities to avoid duplication of work by other study groups. Where a project was undertaken the contractor's name and affiliation is shown:

- | | |
|---|--|
| 1. Structure and Productive Capacity of Canadian Agriculture. | Professor H. Van Vliet,
University of Saskatchewan. |
| 2. Canadian Dairy Industry. | Professor B. B. Perkins,
University of Guelph. |
| 3. Livestock, Poultry and the Feed Grain Economy. | Acres Research and Planning,
Toronto. |
| 4. Wheat and Oil Seeds. | Hedlin Menzies Association,
Winnipeg. |
| 5. Fruit and Vegetables Industry. | Dr. A. Riverin,
University of Sherbrooke, P. Q. |
| 6. Goals of Agricultural Policy. | Professor Philip Thair,
University of Saskatchewan. |

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|--|--|
| 7. Federal-provincial and Inter-provincial Relations in Agriculture in Canada. | Mr. M. Daneau,
Laval University. |
| 8. Rural Poverty: Origins and Consequences for Canadian Agricultural Policy.
<i>Position Paper No. 1</i>
Location of Rural Poverty Groups in Canada and Implications for Rural Welfare Policies.
<i>Position Paper No. 2</i>
Socio-cultural Dimensions of Rural Poverty in Canada.
<i>Position Paper No. 3</i>
Values and Ideologies of Rural French Canada: An Analysis of Social Change.
<i>Position Paper No. 4</i>
Vocational and Educational Aspirations of Rural Youth.
<i>Position Paper No. 5</i>
Poverty Sector in Agriculture. | Professor J. Harp,
Carleton University.

Dr. W. Rogers,
University of Alberta.

Dr. D. Connor,
Consultant, Ottawa.

Professor Marc-Adelard Tremblay,
Laval University.

Professor A. Kristjanson,
University of Manitoba.

Mrs. H. Buckley,
Dominion Bureau of Statistics.

Professor C. Baker,
University of Illinois. |
| 9. Farm Credit in Canada. | — |
| 10. Research. | — |
| 11. Education and Extension. | — |
| 12. Trade Policy. | Professor H. Eastman,
University of Toronto. |
| 13. Taxation. | — |
| 14. Demand and Supply. ¹ | Dr. C. B. Haver,
Macdonald College. |
| 15. Statistical Services. | — |
| 16. Long-range Projections of Demand. | Dr. Cavin, Consultant,
Washington, D.C.
Messrs. F. Shefrin and Z. J. Yankowsky, Canada Department of Agriculture. |
| 17. Factors Affecting the Formulation and Implementation of Canadian Agricultural Policy. | Dr. H. Whalen,
Memorial University. |
| 18. Government Involvement in Agriculture. | Dr. C. Hudson, Consultant,
Ottawa.
Mr. S. W. Garland,
Canada Department of Agriculture. |
| 19. Marketing Boards. | Dr. G. A. Hiscocks, Canada Department of Agriculture.
Dr. H. Walker, Canadian Livestock Feed Board. |

¹Contractor did not deliver before date of this Report.

20. Agriculture in the Western European Countries.

Dr. L. A. Fischer,
Macdonald College.

21. Agri-business.

Mr. R. A. Patterson, University
of Western Ontario.

22. Alternative Land-use Patterns for Prairie Provinces in 1980.

Mr. A. G. Wilson,
University of Saskatchewan.

Other special studies:

23. The Livestock Market alternatives with respect to Canada's Competitive Position.

Prof. R. G. Marshall,
University of Guelph.

24. The Canadian Fruit and Vegetable Industry.

Officers of Canada Department
of Agriculture led by Mr. Eaton.

APPENDIX E

SCHEDULE OF MEETINGS HELD

1967

Task Force Meeting	10 October in Ottawa	— Members of the Task Force
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1968

Task Force Meeting	9 January in Ottawa	— Members of the Task Force
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Task Force Meeting	23 January in Ottawa	— Members of the Task Force
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Canadian Federation of Agriculture	24 January 25 January 26 January in Victoria	— Officers of the Alberta and British Columbia Departments of Agriculture.
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Task Force Meeting	5 February 21 February in Ottawa	— Members of the Task Force The Inter-departmental Committee
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Canadian Federation of Agriculture	27 February in Ottawa	— Executive Council officers
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Task Force Meeting	5 March 6 March in Ottawa	— Minister of Agriculture — Members of the Task Force
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Canadian Agricultural Economics Society	19 March in Ottawa	— Members of the Task Force
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Task Force Meeting	20 March in Ottawa	— Members of the Task Force
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Task Force Meeting	31 March in Winnipeg	— Minister of Agriculture The Deputy Minister The Assistant Deputy Minister The Provincial Director of ARDA
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— Members of the Task Force

Manitoba Farm Bureau	1 April in Winnipeg	— Members of the Task Force
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Atlantic Development Board	25 April in Ottawa	— Council of Deputy Ministers — Special Committee on Farm Income
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— Dr. Weeks and Mr. Levin

Task Force Meeting	26 April in Ottawa morning afternoon luncheon	— The Inter-departmental Committee — Mr. Chancey, Deputy Minister of Agriculture and Co-opera- tives, Province of Newfoundland — Mr. Butler of Privy Council
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Task Force Meeting	6 May in Halifax	—Mr. D. L. Parks, Deputy Minister of Agriculture and Marketing, Province of Nova Scotia, and supporting staff.
Task Force Meeting	7 May in Halifax	—Members of the Task Force —Mr. R. D. Gilbert, Deputy Minister of Agriculture, Province of New Brunswick and supporting staff.
Maritime Federation of Agriculture	"	—Mr. Eric Harvey, President
Task Force Meeting	"	—Members of the Task Force
Task Force Meeting	8 May in Halifax	—Mr. S. C. Wright, Deputy Minister of Agriculture, Province of Prince Edward Island and Mr. Peacock.
	"	—Members of the Task Force
Task Force technical Meeting	14 May in Toronto	—Members of the Task Force
Task Force Meeting	15 May in Toronto	--Members of the Task Force
Acres Research and Planning Ltd.	"	—Representatives of Acres Research and Planning Ltd.
Task Force Meeting	28 May in Québec City afternoon	—Members of the Task Force —Dr. Riverin and research group from the University of Sherbrooke. —Mr. François Poulin of Le conseil d'orientation économi- que de Québec
Québec Department of Agriculture	29 May in Québec City afternoon	—Dr. Benoit Lavigne and officials —Mr. Marcel Daneau and Mr. Yves Dubé of Laval University.
	"	—Messrs. Wampach and Ouellet of Laval University
Task Force Meeting	5 June in Ottawa	—Members of the Task Force
Task Force Meeting	6 June in Ottawa	—The Inter-departmental Committee
Task Force Meeting	8 July in Regina	—Members of the Task Force Provincial Ministers and Deputy Ministers of Agriculture
Hedlin Menzies and Associates Ltd. Consultant	9 July in Regina "	—Met with representatives —Professor Thair
Saskatchewan Wheat Pool	10 July in Regina	—Mr. Charles Gibbings and representatives

Task Force Meeting		—Members of the Task Force
Ontario Special Committee on Farm Income	15 July in Guelph	—Special Committee officials
Task Force Meeting	23 July in Ottawa	—The Inter-departmental Committee
Task Force Meeting	14 August in Toronto	—The Honourable William A. Stewart, Minister of Agriculture for Ontario. Two Deputy Ministers of Agriculture.
Meat Packers Council of Canada	”	—Members of the Council
Ontario Marketing Board	”	—Mr. Earl Mighton and Mr. Burrell, Chairman and Vice-Chairman.
Task Force Meeting	15 August in Toronto	—Members of the Task Force —Members of Acres Research and Planning Ltd.
Task Force Meeting	25 August in Edmonton	—Members of the Task Force
Task Force Meeting	26 August in Edmonton	—Members of the Task Force
Canadian Cattlemen's Association		—Representatives of the Canadian Cattlemen's Association
The Alberta Wheat Pool	26 August afternoon	—Mr. G. L. Harrold and Mr. Nelson Malm, Chairman and Vice-Chairman. —Dr. E. E. Ballantyne, Deputy Minister of Agriculture of Alberta and six heads of departments.
Task Force Meeting	evening	—Members of the Task Force
Farmers Union of Alberta	27 August in Edmonton	—Members of the Task Force and members of the Farmers Union of Alberta
Alberta Federation of Agriculture	afternoon	—Members of the Alberta Federation of Agriculture
Task Force Meeting	28 August in Victoria, B.C.	—Mr. A. H. Turner, Deputy Minister of Agriculture for British Columbia
British Columbia Government	luncheon	—The Honourable C. Shelford, Minister of Agriculture, the Honourable W. Kiernan, Minister of Recreation and

British Columbia Federation of Agriculture	afternoon	Conservation, the Honourable W. Skillings and several departmental heads. —Mr. Stocks
Task Force Meeting	evening	—Members of the Task Force
L'Union Catholique des Cultivateurs de la Province de Québec	9 September in Montreal	—The Chairman, Mr. Lionel Sorel, the General Manager, Dr. Saab and Mr. Henri-Paul Blanchard
La Co-opérative Fédérée du Québec	9 September in Montreal	—Mr. G. E. Turcotte, —General Manager, Messrs. Albert Gingras, Jules St.-Germain, M. Lavallee, Roland Belcourt and L. P. Poulin —Members of the Task Force
La Corporation des Agronomes du Québec	9 September in Montreal	—Mr. Henri Brunelle, Chairman Messrs. Dominique Lemay, Jean-Marc Bélanger, Lucien Ruelland, Paul Morin and Théodore Mongeon.
Task Force Meeting	10 September in Montreal	—Professor C. B. Haver and Professor John Kurien Members of the Task Force
Task Force Meeting	25 September in Ottawa	—Minister of Agriculture, Professor MacFarlane, Mr. Comtois, Dr. Thain, Mr. Vaillancourt, and Dr. Poirier.
Task Force Meeting	29 September in Toronto	—Members of the Task Force
Hedlin, Menzies Group	30 September in Toronto	—Messrs. Ralph Hedlin, Merrill Menzies and Clive Davidson
Task Force Meeting	20 October 21 October in Toronto	—Members of the Task Force
Task Force Meeting	6 November in Ottawa	—Members of the Task Force
Task Force Meeting	26 November in Ottawa	—Members of the Task Force
Task Force Meeting	27 November in Ottawa.	—Council of Deputy Ministers of Agriculture. The Inter-departmental Committee
Task Force Meeting	19 December in Ottawa 20 December	—Members of the Task Force —Members of the Task Force —Deputy Minister of Agriculture and Dr. Poirier

1969

Task Force Meeting	10 January in Toronto	— Members of the Task Force
Task Force Meeting	11 January 12 January in Toronto	— Members of the Task Force
Task Force Meeting	14 February 15 February in Winnipeg	— Members of the Task Force
Task Force Meeting	28 February in Ottawa	— Members of the Task Force
Task Force Meeting	14 March in Ottawa	— Members of the Task Force
Task Force Meeting	14 March in Ottawa	— The Inter-departmental Committee — Members of the Task Force
Task Force Meeting	26 March in Ottawa	— Provincial Deputy Ministers of Agriculture
	27 March in Ottawa	— Members of the Task Force
Task Force Meeting	16 April in Ottawa	— Members of the Task Force
Task Force Meeting	21 May in Toronto	— Members of the Task Force
Task Force Meeting	24 June 25 June in Ottawa	— Members of the Task Force
B.C. Tree Fruits Ltd. B.C. Fruit Marketing and other groups in the industry	3 July in Kelowna, B.C.	— Professor D. MacFarlane, Mr. D. Woodward and representa- tives of B.C. Tree Fruits Ltd.
B.C. Egg Marketing Board. B.C. Federation of Agriculture	4 July in Victoria B.C.	— B.C. Provincial Deputy Minister of Agriculture, and staff, officers of the B.C. Egg Marketing Board and B.C. Federation of Agriculture.
Coast Vegetable Marketing Board	7 July in Vancouver, B.C.	— Dr. MacFarlane, Mr. Woodward Mr. Gilmore — Dr. MacFarlane met with Mr. McAnsh, consultant
L'Union Catholique des Cultivateurs	21 July in Montreal	— Dr. MacFarlane, Mr. Comtois Mr. Woodward; Dr. Saab and Mr. Alain (U.C.C.)
U.S. Embassy and Task Force Meeting	23 July in Ottawa	— Dr. MacFarlane, Mr. Woodward met with Mr. Eugene Olson, Agricultural Attaché and Mr. Norman.

Canadian Embassy	10 September in Washington	—Dr. MacFarlane, Dr. Thain and Mr. Woodward met with the Ambassador Mr. Ritchie
Library of Congress United States Department of Agriculture.	11 September 12 September in Washington	—Messrs. Campbell, Paarlberg, Ioanes, Hjort, Bates, Juers, Wilson, Trelogan, Cowden and Hansen and Mr. Wilcox.
Industry, Trade and Commerce	18 September in Ottawa	—Dr. MacFarlane, Mr. Woodward met with Messrs. Schwartzmann, Miner, McNaught and Heany
C.I.D.A.	18 September	—Mr. Peters
Canadian Livestock Feed Board	29 September in Ottawa	—Messrs. Perreault, McDonough, Dernier and Huffman.
Task Force Meeting	29 September in Ottawa	—Members of the Task Force
Department of Industry, Trade and Commerce	30 September in Ottawa	—Dr. MacFarlane met with members of the Department
Task Force Meeting	17 October in Ottawa	—The Honourable H. A. Olson, MP., Minister of Agriculture, Mr. S. B. Williams, Deputy Minister, Mr. B. Williams, Executive Assistant to the Minister
Task Force Meeting	18 October in Ottawa	—Members of the Task Force
Task Force Meeting	21 November in Toronto	—Members of the Task Force
	22 November in Toronto	—Members of the Task Force
Task Force meeting	5 and 6 December in Toronto	—Members of the Task Force
Task Force meeting	12 and 13 December in Toronto	—Members of the Task Force
Task Force meeting	22 and 23 December in Toronto	—Members of the Task Force
Task Force meeting	29 and 30 December in Ottawa	—Members of the Task Force
1970		
Canada Department of Agriculture	2 January	—Honourable H. A. Olson, Dr. R. P. Poirier and Mr. D. Woodward
Task Force meeting	17 January	—Members of the Task Force

APPENDIX F

SUBMISSIONS RELATING TO TASK FORCE WORK

1. *Solicitation*

At a meeting of the Task Force in Toronto on 27 December 1967 the policy governing solicitation of submissions was formulated. Both public and private parties were to be approached by letter and advertisement respectfully. Accordingly the Secretariat wrote to each provincial department of agriculture deputy minister to solicit a submission. At about the same time the following advertisement appeared in the publications listed below:

FEDERAL TASK FORCE ON AGRICULTURE
Submissions on Agricultural PROBLEMS and
POLICIES are invited from Individuals and
Organizations

BEFORE APRIL 30, 1968
(In French or English)

For information and format write to:

The Secretary,
Federal Task Force on Agriculture,
P.O. Box 1527, Ottawa, Ontario.

Due to time limitations public hearing will not
be held.

Publications in which advertisement appeared, by province:

PROVINCE	PUBLICATION	LOCATION
Newfoundland	<i>The Evening Telegram</i>	St. John's
Prince Edward Island	<i>The Charlottetown Guardian</i> <i>The Evening Patriot</i>	Charlottetown "
Nova Scotia	<i>The Halifax Herald</i>	Halifax
New Brunswick	<i>Maritime Farm</i> <i>Co-operative Dairyman</i> <i>L'Evangeline</i>	Saint John " Moncton
Québec	<i>The Gazette</i> <i>Family Herald</i> <i>La Presse</i> <i>La Terre de Chez Nous</i> <i>Le Bulletin des Agriculteurs</i> <i>La Ferme</i> <i>Le Producteur de Lait</i> <i>Le Soleil</i> <i>La Tribune</i>	Montréal " " " " " " " Québec Sherbrooke
Ontario	<i>The Ottawa Journal</i> <i>Le Droit</i> <i>Agricultural Institute Review</i> <i>Financial Post</i> <i>Globe and Mail</i>	Ottawa " " Toronto "

PROVINCE	PUBLICATION	LOCATION
	<i>Ontario Milk Producer</i>	"
	<i>Farm and Country</i>	"
	<i>Good Farming</i>	Don Mills
	<i>Canadian Swine</i>	Elora
Saskatchewan	<i>The Western Producer</i>	Saskatoon
	<i>The Saskatoon Star-Phoenix</i>	"
Manitoba	<i>The Winnipeg Free Press</i>	Winnipeg
	<i>Country Guide</i>	"
	<i>Canadian Cattleman</i>	"
	<i>Free Press Weekly</i>	"
	<i>The Manitoba Co-operator</i>	"
Alberta	<i>Albertan</i>	Calgary
	<i>The Lethbridge Herald</i>	Lethbridge
	<i>The Edmonton Journal</i>	Edmonton
	<i>Alberta Country Life</i>	"
	<i>Co-op News</i>	"
British Columbia	<i>Sun—Vancouver Province</i>	Vancouver
	<i>Canada Poultryman</i>	New Westminster

In response to each request for details and format the following letter was sent:

Agricultural Problems and Policies

Thank you for your reply to the notice regarding the Task Force work and your interest in its success and effectiveness.

Our terms of reference are, broadly, an examination of the many aspects of the agricultural economy with a view to providing a comprehensive report to the Federal Government, Minister of Agriculture, in order to provide a basis for new policy decisions for the future. It is therefore of essential interest to the Task Force to have your submission.

Each submission should be confined to a single problem or policy and not be more than 1,500 words in length. The format to be followed should be:

- (a) Statement of the problem.
- (b) Short explanation of present legislation, policies or practices governing the problem and whether or not this is a provincial or federal question.
- (c) Description of the effects, impact or cost of the problem or policies.
- (d) Your conclusions simply stated.
- (e) Your suggestions regarding possible solutions to the problems and, if possible, the effect that each solution would have on the agricultural economy.

Please type or write legibly on quarto size (8½" × 11") paper using double-line spacing. Affix a cover sheet with the title of the subject, e.g. "Problem of Farm Credit to the Small Farmer in Northern Ontario", and include your name, address, affiliation, e.g. farmer, dairy manager, etc.

We, in the Task Force, are looking forward to your submission and ask that it be received by us no later than 30th April, 1968.

2. Submissions Received

As a result of the solicitation of submissions the following were received. It is interesting to note the response, by province and compare this against other factors such as: the number of publications used, by province; the incidence of farmers in the low-income range etc.

Although closing date for submissions was set as 30th April, 1968 we accepted them up to 15th July, 1968.

Provincial Governments

Alberta
British Columbia
Manitoba
New Brunswick
Nova Scotia
Prince Edward Island
Saskatchewan

Private (by province)

ALBERTA

Alberta Wheat Pool
Canadian Cattlemen's
Association, Calgary
Theodore W. Farthing,
Lousana

R. D. Thirsk,
Kelsey
Western Hog Growers
Association, Edmonton

- Policy of Cheap Food
- The Position of Cattle Producers
- Effects of the Federal Government's
"Economic-sized Farm Unit" on the
Alberta Farmer
- Problem of Diminishing Returns
for Overproduction
- Lower Per Unit Production Costs

BRITISH COLUMBIA

Donald James Andow,
Gibsons

British Columbia Fruit Growers'
Association, Kelowna
British Columbia Sugar Refining
Company, Limited,
Vancouver
Broadacres Farms Limited,
Abbotsford
Murray Davie,
Ladner
Stone Research Foundation
Vancouver

- Problem of the Federal Task Force to
Deal with Local Problems at the Federal
Level
- Long-term Farm Financing
- Cane and Beet Sugar Operations
- Soil and Farm Produce Contamination
- Agricultural Land Use Policy
- Health Through Good Nutrition

MANITOBA

Carman District Farm Business
Association,
Carman

K. W. Clark,
Winnipeg
Egg and Pullet Producers
Association of Manitoba
Morris
Alexander Kwast,
Snowflake

- (a) Production Research
- (b) Tariff Protection or Floor Prices on
 Certain Crops Such as Oilseeds
- (c) Agricultural Policy
- (d) Grain Marketing Policy and Quota
- Research and Education
- Canadian Egg Market
- Canada, World Utopia or U.S.
 Satellite in 30 years?

Ben Lemky,
Arden
Manitoba Farmers' Union

Western Manitoba Farm
Business Association,
Hamiota-Minnedosa
Winnipeg Grain Exchange,
Winnipeg

ONTARIO

Canadian Co-operative Wool
Growers,
Toronto
Edward Goettling,
New Dundee
Haldimand County Federation
of Agriculture,
Caledonia
Gordon Hunsberger,
West Montrose
David Kotchan,
Simcoe
Meat Packers Council of Canada,
Islington
H. M. O. O'Neil,
Clarkson
Ontario Federation of Agriculture,
Toronto
Ontario Grape Growers Marketing
Board,
St. Catharines
Ontario Hog Producers'
Association,
Toronto
Ontario Tender Fruit Growers'
Marketing Board,
St. Catharines
Martin C. Pick,
Richmond Hill
Lawrence A. Pogue,
Wellandport
J. R. Rosenfeld,
Wheatley
C. Sabiston,
Unionville
R. Schubert,
Hamilton
Wilbur Smith,
Port Colborne
Mrs. Alex Stuart,
Renfrew
Waterloo County Federation
of Agriculture,
Kitchener

- Income Versus Expenses
- A Farmer's Point of View on Canadian
Farm Problems
- Policy and Goals of Farmers

- Agriculture Policy

- Sheep Industry in Canada

- Why do Canadian Farmers Have an Ever-
increasing Financial Problem?
- Long-term Farm Policy

- Food Shortage and Canadian Surplus

- Problem of Farm Credit to the
Small Farmer
- Policy Considerations for Animal
Agriculture
- Surplus of Canadian Dollar Value

- Agricultural Revolution

- Grape Growers Problems

- Hog Producing

- Fruit Policy

- Prices, Planning and Technical Service
- Notes on a Long-Range Agricultural Policy
- Problem of Decline in Prices for General
Cash Crops Mainly Corn and Soya Beans
- Low-fat Diets and the Farm Producer

- Four Crop Study

- Anger to Canadian Economy

- Problem of Farm Credit to the Small
Farmer of Northern Ontario
- Abundance of Cheap Food

QUÉBEC

Fédération de l'Union Catholique
des Cultivateurs d'Amos,
Amos
Office du Crédit Agricole du
Québec,
Québec
L'Union Catholique des
Cultivateurs,
Montréal

- Expression "Paysanne" du Malaise Agricole
- Le Crédit Agricole au Québec
- Tendances et Problemes de L'Agriculture
Québécoise

SASKATCHEWAN

Edwin Chamberlin,
Semans

Mrs. Mary G. Hanson,
Maple Creek
J. R. Knelsen,
Moose Jaw
Perrin Ranching Company,
Limited,
Beechy
Saskatchewan Conservation and
Development Association,
Tiny
Saskatchewan Poultry Board,
Regina

- Cost-Price Squeeze Confronting the Primary
Producer—with Special Reference to the
Western Grain Farmer
- Communication and Understanding
- Hog Production in Saskatchewan
- Problem of Farm Credit for Young Farmers
and Ranchers Buying Into Companies or
Co-operatives
- Effect of the Problem of Surplus Water on
the Production and Income of Prairie Agri-
culture
- Saskatchewan Poultry Industry

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